STUDIES

IN

CURRENCY, 1898

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OR, INQUIRIES INTO CERTAIN MODERN PROBLEMS CONNECTED WITH THE STANDARD OF VALUE AND THE MEDIA OF EXCHANGE

BY

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PREFACE

The following papers have no pretence to system, for they have been written from time to time, as circumstances required, principally for the purpose of throwing light on the questions raised by Bimetallists. Nor do they lay claim to novelty: for they only attempt to apply well-known principles to the facts of to-day.

In this, as in other departments of Economic knowledge, circumstances change, and the rules and principles laid down by earlier thinkers, however sound, require continual re-application and re-statement. Business never stands still, and the mechanism of Exchange is constantly receiving new developments.

In considering the subject of Currency and Standard of Value, there appear at the present moment to be three features which require special consideration.

First.—The development in advanced nations of the practice of Banking, and the use of Credit as a medium of Exchange.

Secondly.—The divergence between Gold and Silver considered as Standards of Value.

Thirdly.—The constant and growing extension of modern business beyond the limits of particular countries, so that the distinctions formerly drawn between Foreign Trade and Home Trade are ceasing to exist, and the principles and practice of Exchange are becoming world-wide in their application.

The principal object of the following papers is to show how our system of Currency works under these comparatively new conditions. The first six papers, though they have been in part suggested by the Bimetallic controversy, may be read apart from it, as contributions towards a more distinct and complete apprehension of the Theory and Practice of Currency.

The following is an account of their contents.

No. I., entitled "The Measure of Value and the Metallic Currency," is an explanation of our own system of Currency, which, in spite of its cumbrous arithmetic, is probably, in point of principle and general convenience, the best in the world. In point of principle it has two defects, viz., that the Government cannot be compelled by law to issue any quantity of token or subsidiary coinage that may be required in return for its face value in gold; and, which is more important, cannot be compelled by law to redeem this subsidiary or token currency in gold. No practical difficulty arises from these defects, for as much token currency as is wanted is always to be had; and there is, under present arrangements, no danger of over-issue. But the question of principle involved in these defects assumes considerable importance in face of the

enormous recent development of subsidiary token coinage in other countries.

Paper No. II., entitled "England's Adoption of the Gold Standard," contains a statement of the steps by which England was led to the adoption of a Gold Standard of Value. It is important, because industrious Bimetallic investigators had involved the subject in a haze of uncertainty and misrepresentation. The truth is that the adoption of the Gold Standard really took place at the end of the seventeenth, not of the eighteenth century; and that it was due to the habits and wishes of the people, not of the Government, which desired to maintain Silver as the Standard Metal—One of the most important lessons to be learned from it is, that, in order to be effectual, laws relating to the Currency must be in accord with the habits and wishes of the people.

No. III., entitled "Bimetallism and Legal Tender," strikes at the heart of the Bimetallic theory, which is founded on the notion that by making Silver Legal Tender it is possible to give it a fixed artificial gold value. In the paper under consideration it is shown that the Law of Legal Tender has no operation in International dealings; that the value of our Standard Gold coin owes no virtue to the Law of Legal Tender which it does not equally possess under the ordinary Law of Contract; that in our Currency system the Law of Legal Tender is only effective in respect of our subsidiary token coinage; and, finally, that in cases where the Law of Legal Tender has been used for the purpose of giving to inconvertible currencies a

value beyond their market values, it has often been so used for fraudulent purposes, and has constantly been productive of injustice and confusion.

It is to an exaggerated estimate of the effect and value of the law of Legal Tender that most errors in the theory and practice of Currency are due. The essential character of the Standard Coin, or, which is the same thing, of the metal of which it is composed, is that it has in itself a real value in Exchange. In other words it is a commodity which the habits and practice of mankind have led them to desire, and for which they are consequently always willing to exchange other commodities. It is upon this value in Exchange that its utility as a standard depends, and no Currency can be considered sound which has not this value for its basis. The soundness of a system of currency depends, therefore, not on the law of Legal Tender, or upon any other positive law; but upon a much more solid basis, viz., the interests, habits and practices of mankind. Under a system which has these for its basis a law requiring men to accept the Standard Coin in payment of debt resolves itself into the ordinary law of contract, which compels a man to receive and pay that commodity which he has promised to receive and pay. Paper money, credit money, token money, may be sound currency, but only if it is, in effect, an obligatory promise to pay full standard money; in other words if it is convertible into the standard coin. There is, therefore, so far as regards the Standard Coin or promises to pay the Standard Coin, no necessity for any law of Legal Tender which assumes to attach to particular media of exchange

values which the habits and practice of mankind have not attached to them, and those who put faith in such a law are in danger of falling into serious error.[1]

No. IV., entitled "Gold, Credit and Prices," is an attempt to show how large a part Credit of all kinds now plays as a medium of Exchange, and to trace, however imperfectly, what is the nature of Credit and what are its limitations. The enormously developed use of Credit is, as mentioned above, one of the striking features of the present time. It not only economises the use of the precious metals; it is a substitute for them, and it has revolutionised the conditions which formerly determined their value. That its use is extending daily, that its functions are International as well as Municipal, and that the advance of a nation in civilisation may be in a great degree measured by the free development and proper use of Credit money is, I think, obvious. In short, its use and extension have no limits, except those which arise from the necessity of issuing it under such conditions as secure its soundness, and especially under the condition that it shall always be convertible into the metallic coin which it professes to represent. It is essential to bear this condition in mind, because there are able men who believe in Credit money without a Metallic basis. Against such

[1] It is the failure to give sufficient weight to the considerations contained in this and the preceding paragraph which seems to me to be the chief defect in Major Leonard Darwin's recent *Treatise on Bimetallism.* Of the many Bimetallist Treatises I have read, this seems to me to be the fairest and most exhaustive; if indeed our ordinary Bimetallists will admit into their ranks one who repudiates with indignation any attempt to use Bimetallism as a means of forcing up prices.

men it may be the duty of some future Gold Standard Association to maintain the doctrine involved in the answer to Sir Robert Peel's famous question, "What is a Pound?"

No. V., entitled "The Quantitative Theory of Money and Prices," is an attempt to show in the first place what is the relation between Money, including under that term all Media of Exchange, whether they take the form of Metallic Money or of Credit, and Prices; and, in the second place, to show what is the relation between the Pound sterling, considered as the unit of Standard Metal in terms of which all contracts are made, and Prices. It is scarcely necessary to say that these two questions, though often confounded, are very different questions. The answers to them are vague and general, and must, I think, continue to be so, from the great complexity of the subject. At the present moment their chief value in the inquiry is to refute the speculations of the Bimetallists concerning a connection between the fall of certain prices and the supposed Scarcity of Gold.

No. VI., entitled "Bimetallism and the Foreign Exchanges," is an attempt to do justice to the argument of the Bimetallists that mischiefs and inconveniences have arisen from the divergence of Gold and Silver, and at the same time to correct the exaggerations of which they have been guilty. It is one of the chief objects of this paper to expose the dangerous fallacy which assumes that a nation can grow rich at the expense of its neighbours by depreciating its standard of value; whilst another of its principal objects is to

show how desirable it is that there should be one standard of value throughout the commercial world, and especially within the limits of the British Empire.

Both these objects are of great importance at the present moment, when the chief subject of interest in connection with currency is the future standard of value for India. As regards the first of them I may quote the language of Lord George Hamilton in the recent debate.[1] He says, "The exporter wants a cheap rupee. Every one who exports produce from India likes a falling rupee, for the reason that it raises prices. But there is always an interval between the rise in the price of the commodity, and the rise in the wages of those who engage in producing the commodity, and the exporter gets the benefit for the time being." It is one of the objects of this paper to show that these arguments of Indian exporters in favour of a cheap and falling rupee should not be listened to. They have their own axes to grind.

As regards the other principal object of this paper, viz., the desirability of one common Standard of Value, I need say little at a time when the practical question of the moment is not "whether India shall have the same Gold Standard as the United Kingdom," but in what manner India can best attain that Standard. But I wish to make an acknowledgment to the Bimetallists that they have always appreciated the advantage of one common Standard of Value for the world, and especially of one common Standard of Value for this country and India; which, I am sorry to say, is not the case with all Monometallists.

[1] Speech in the House of Commons, 29th March, 1898.

The four following papers are more purely controversial—and would have little or no meaning were it not for the Bimetallic controversy.

No. VII., entitled "Has the Gold Standard made Rich Men richer and Industrious men Poorer?" is intended to refute Bimetallist allegations that the Gold Standard favours creditors and depresses industry, by showing that in the period during which it is supposed to have had this operation the rich have not become richer or the poor poorer, but the reverse; and that the most striking economical feature of this period is, that whilst the luxuries and the human services which rich men use have become more valuable and have been more highly paid for, the necessaries of life which poor men use have become cheaper.

No. VIII., entitled "The Weakness of Bimetallism and the Folly of a Conference," repeats arguments contained in other papers, and I insert it only because it contains a protest against that most fatal and foolish resource of men who have come to no clear and definite conclusions of their own—viz., an International Conference.

No. IX., entitled "Shall we Degrade our Standard of Value?" contains an article written in the autumn of 1894 for the *National Review* at the request of the Editor, giving a *résumé* of the controversy as it then stood.

No. X., entitled "Wanted a Ratio," consists of two letters to the *Times* in March, 1895. I reprint them because the questions asked by them have never been directly answered. Bimetallists have a practical difficulty

in answering them because they know that the old ratio of $15\frac{1}{2}$ or 16 to 1 would be looked upon as robbery here, whilst no other ratio would suit the peculiar circumstances of France and the United States. But, beyond this practical embarrassment of our adversaries, there is great importance in the question. It illustrates the fact that there is no such thing as a natural ratio between Gold and Silver, and that the proposals of the Bimetallists are based on the preposterous idea that it is possible by law to fix a relative value for any two substances which have no natural relation to each other, and to fix this value at any ratio the lawgiver may choose.

No. XI., entitled "Bimetallism and the Indian Mints," and No. XII., containing the reprint of a note by Lord Welby and myself annexed to the Report of the Indian Currency Committee, relate to the future of the Currency and Standard of Value of India, which is the most important Currency question now pending in the British Empire, and probably in the world. These pages contain a short statement of the circumstances under which the Mints were closed to Silver; an indication of the future policy to which Lord Welby and I thought that this step must lead—a policy, namely, "*under which the Government of India should be prepared to secure the convertibility into Gold of their token Silver Currency, and should with that object accumulate a sufficient reserve of Gold*": and a statement of reasons why the Wolcott proposals of 1897 should not be adopted. The subsequent action of the Indian Government, and the present action of the Home Govern-

ment, have strongly confirmed these views. It has for some time been obvious that there are only three courses open to the Indian Government—viz., to adhere more or less permanently to the present plan, under which there is no automatic Standard of Value in India; to reopen the mints to Silver; or to make provision for a Gold Standard. To the two first of these courses there are insuperable objections; as is conclusively admitted by the recent action of the Indian and of the Home Government in rejecting the Wolcott proposals and at the same time appointing a Committee, which, as stated by Lord George Hamilton, is to inquire "into the monetary system of India and into the proposals of the Indian Government for the establishment of a Gold Standard in that country, with the view of consummating the policy which was commenced in 1893." These papers, Nos. XI. and XII., I may add, should be read in connection with the paper No.VI., entitled "Bimetallism and the Foreign Exchanges." Whatever may be possible or desirable in the matter of a single Standard of Value for the world, there can be no doubt that it is most desirable that there should be one Standard of Value and one Standard only for the British Empire, and that there should be a steady par of Exchange between India and the United Kingdom.

In addition to the above papers I have reprinted in this volume two extracts from recent Blue Books, because they contain facts and considerations which it is desirable that students of the subject of Currency should have at hand in the most convenient form.

The first of these extracts, No. XIII., headed "Fall in the Value of Silver," contains reasons—much strengthened since the date of that Report—for thinking that the divergence between Gold and Silver is due to a fall in the value of Silver rather than to a rise in the value of Gold. This is especially important at a moment when the chief subject which engages Currency Reformers is the adoption of a Gold Standard for India. Those who are opposed to this step generally assume that the change in the relative values of Gold and Silver are due to Gold rather than Silver; that Gold has appreciated in value, whilst Silver and Silver prices have remained steady; and that Silver is therefore the better Standard of the two. The arguments contained in this paper show how little foundation there is for this view; and recent investigations into Silver prices in India show how erroneous is the assumption—so constantly made—that Silver prices in India have been more steady than Gold prices in England. (See Paper by Mr. F. Atkinson, in the "Journal of the Statistical Society," March, 1897.)

No. XIV., headed "Currencies of the World," is an extract from the Report of the Indian Currency Committee, and is interesting as showing not only how many forms efficient systems of Currency may take, but in how many ways and to what an enormous extent token or subsidiary Currencies may be kept at a Gold value, even without the very wise and proper precautions which are adopted in our own system. Throughout a large and constantly increasing portion of the commercial world Gold is

the real Standard of Value, though in few, if in any, countries is it the general medium of Exchange; and the Credit, or Token Currencies which constitute the actual media of Exchange are kept at their Gold face value by means and to an extent which, in the absence of such experience, Currency theorists might well believe to be untrustworthy and incredible.

Half a century ago Economists and Statesmen were exercised with the notion of one "Universal Money" for all nations. We seem farther off than ever from attaining any such object. But the present condition of the Currencies of the world does seem to hold out a prospect of what is quite as important and much more feasible—viz., one "Standard of Value"—with a steady par of Exchange—for the principal commercial nations of the world. There are many obstacles to the realisation of such an idea, and it may prove to be impracticable; but, at any rate, it is a "devout imagination."

I have added three Appendices containing one table and two diagrams.

The table in App. I. shows the production of Gold and Silver since the beginning of the sixteenth century. When we consider that the stock of Gold in the world accumulates with every new accretion, and is only wasted or destroyed to a comparatively small extent; that credit and token money have largely replaced Gold as media of Exchange; that the additions to the stocks of Gold effected since the middle of the present century are enormous, whilst the rate of increase to these additions seems to be perpetually rising; and that the new

demands on these stocks made by the nations which have recently adopted a Gold Standard are comparatively small in amount ;[1] the figures given in this table seem to me to form an eloquent reply to those who allege that any such scarcity of Gold as would account for a general fall in prices has been caused by the demonetisation, or, more accurately speaking, the "de-standardisation," of Silver. On the contrary, the table shows conclusively that the recent additions to the world's stock of Gold have been on such a scale as far to outweigh the largest estimates which any one has made of the increased demand for Gold caused by any recent disuse of silver as Standard Coin. The danger at the present moment would rather seem to be that there may be a plethora of Gold, a danger which past experience teaches us to look forward to without concern. Further, looking not only to the increased Stocks of Gold, but also the immense recent production of Silver as shown by this table, it certainly does not appear to be either necessary or desirable to increase the material of the Standard Coin of the world by adding Silver to Gold,

The diagram contained in Appendix II. shows the relative value of Gold and Silver since the beginning of the sixteenth century. Roughly speaking, the Gold value of Silver fell heavily during the sixteenth

[1] What these increased demands have been is very uncertain. The highest estimate in 1894 was £200,000,000, and most bimetallist estimates were much lower. The amounts added to the stocks of Gold in the world between 1840 and 1870 were more than £600,000,000, and those added between 1870 and 1894 were more than £580,000,000.

century and most of the seventeenth century; during the last quarter of the seventeenth century and the first seventy years of the eighteenth century it continued with small fluctuations tolerably constant, and since 1870 it has fallen beyond all precedent. On the whole the Gold value of Silver has a distinct tendency to fall, and to fall without recovery. To wed the two metals together again is surely beyond the power of law.

Appendix III. contains a diagram showing the relation between the Gold value of the legal Rupee and the Gold value of Silver since the closing of the Indian Mints. It is clear from this diagram that the Rupee is entirely divorced from Silver, and that even under the circumstances of the past two years, which have been very unfavourable, and in the absence of convertibility, the Gold value of the rupee has approached nearly to 1s. 4d.

In conclusion, I feel that I ought to apologise for publishing anything so fragmentary as these papers on so important a subject. But if I had waited till I could put forward a complete theory of Money, I should never have written anything. Indeed, so far as I can judge, there does not exist sufficiently accurate knowledge to admit of a perfect theory. Practice outruns speculation, and philosophy lags behind business. The doctrines of yesterday are incomplete, if not inaccurate, when applied to the facts of to-day; and the developments and refinements suggested from time to time by commercial exigencies are too subtle and too intricate to be brought

within the grasp of precise formulas. How imperfect our knowledge is may be gathered from what is said in the following papers on the relations between Money and Price, and the adjustments required by the Foreign Exchanges. A man who professes complete and accurate knowledge on such subjects is not to be trusted; and the wisest of us may well be content if he can remove a little rubbish from the ground, and add a brick here and there to the edifice of knowledge.

FARRER.

ABINGER HALL, *April*, 1898.

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THE MEASURE OF VALUE

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I

THE MEASURE OF VALUE AND THE METALLIC CURRENCY

Written originally as a chapter in "The State and Trade," 1883, *and rewritten for the Gold Standard Defence Association*, 1895.

1. *It is a function of every civilised State to settle the terms in which trading transactions are carried on.* The State does this in two ways. First, it prescribes certain measures of weight and size in which the quantities of articles bought and sold are to be described, and it gives the means of ascertaining that these measures are accurate. Secondly, it both determines and stamps and issues the coin in which the value of all goods bought and sold is measured, and by means of which, as a medium, they may be exchanged. The utility of this function is obvious. In the simplest and rudest form of trading, one article would be exchanged against another, without any description or definition except such as would arise out of the direct impression made by the particular articles on the senses of the two parties. An apronful of corn would be exchanged against an armful of meat or against a hewn tree or stone, or a day's labour

would be exchanged against some handfuls of wheat; but there would be nothing by which the quantities of any of these articles could be known, or by which, in the absence of the articles themselves, any of the parties could tell what he was giving or getting. Nor would there be any common measure of value to which each could be referred. The person possessing corn, and wanting meat, wood or stone, must wait until he could find a person possessing the requisite piece of meat, or wood, or stone, and at the same time wanting corn; or the person able to labour and wanting corn must wait until he could find a person possessing corn and wanting labour; and then the two parties must come together, and compare their respective articles by the use of their unassisted senses.

2. Contrast this with the sale of 100 quarters of corn at so many pounds sterling a quarter; or the purchase of so many pounds of beef at so many pence a pound; or the wages for an eight-hour day's labour at 2s. 6d. per hour. The facilities of dealing in the latter cases, as compared with the former, are obvious. But these facilities would be impossible if we did not know accurately and universally what was meant by a quarter, and by a pound weight, and by a £ sterling, and by a shilling, and by a penny; and in order that they may be accurately and universally known, they must be determined in such a way that all persons must accept them; and this can only be done by the authority of the State. It has therefore been admitted in all civilised societies that the State must determine measures of weight, size, and value. *The State accordingly provides certain standards of weight and size*—viz. a standard pound weight and a standard yard measure—which are kept at Westminster; and

by reference to these standards all the measures of weight, length, and capacity used in ordinary dealings are, under carefully prepared regulations, verified and tested.

3. The determination of the standard or measure of value is a less simple affair than the determination of the standard pound weight or yard. The value of any given thing is the quantity of other things for which it will exchange; and that quantity is, of course, constantly changing, and changing differently in the case of different things. It is, of course, in such a case impossible to have any fixed standard or measure of value such as are the standard pound weight and the standard yard measure of length. The only thing which can be done is to select some object which varies as little as may be in its relation to other things, and to make a given quantity of this the standard by which the value of other things is measured. For this purpose mankind has for ages used gold and silver. Out of these metals have been fashioned the coins in which payments have been made, and by means of which exchanges have been effected. In other words, *gold and silver coins have not only been standards of value, but means of exchange;* and their true position and character as standards of value have been secured by making them also the actual media by which purchases and sales have been effected. For instance, suppose that a quarter of wheat, a coat, and a day's labour will all exchange one for the other, and that each will also exchange for the quantity of gold contained in an English sovereign. Then the gold contained in the sovereign or pound sterling will be the measure of value of the quarter of wheat, of the coat, and of the day's labour; and an actual gold sovereign may also be the medium by the

use of which these things are exchanged for one another.

4. But though standard coins are thus both measures of value and media of exchange, it is very important to distinguish between the two functions. In any sound system of currency the metal coin which is the measure of value must also be *a* medium of exchange: but there are many media of exchange besides the standard coin. Indeed, in this country, and in the greater part of the civilised world, *the standard coin plays an insignificant part as a medium of exchange compared with other more convenient media*, such as subsidiary token-coins, bank-notes, bills of exchange, bankers' cheques, and other forms of credit. It is from a neglect of this important distinction, and of the actual facts of common business, that many errors and much confusion arise. We find, for instance, the word "money" used—even by accurate writers like Lord Liverpool—as synonymous with standard coin; whereas, in the daily language of the market, of the press, and of common life, "money" means and includes not only gold sovereigns, but silver, shillings, and pence, as well as all the various instruments of credit with which we buy and sell, and which are probably at least a hundred times as great at any given moment as all the gold sovereigns in the country.[1]

[1] The following passage from Lord Liverpool's well-known treatise on the *Coins of the Realm* contains so good a description of the standard coin that I quote it here, merely adding the correct expression "standard coin" where Lord Liverpool uses the word "money":—

"The [money] standard coin of a country is the measure by which the value of all things bought and sold is regulated and ascertained, and it is itself, at the same time, the value or equivalent, for which goods are exchanged, and in which contracts are generally made payable. In this last respect, the [money] standard coin, as a

5. Of the coins used in our currency, the pound sterling or gold sovereign is the real standard of value, and gold sovereigns are the only coin which are legal tender for debts exceeding forty shillings.[1] The gold sovereign consists of a certain fixed fraction of an ounce of pure gold combined with a certain quantity of alloy.[2] *The essential function of the Mint consists in ascertaining that its weight and purity are what the law requires, and in stamping and issuing it so that it may be known everywhere as certified by the Government to possess these qualities. Beyond this the Government does nothing to determine its value, which is simply the value of that quantity of gold in the open market.* But, it may be said, how can this be the case when the Mint price of an ounce of gold is fixed by law at £3 17s. 10½d.? The answer is, that by the *Mint price* of gold is only meant the quantity of sovereigns and fractions of a sovereign into which the Mint divides an ounce of gold which is brought to it

measure, differs from all others, and to the combination of the two qualities before defined, which constitute the essence of this [money] standard coin, the principal difficulties that attend it in speculation and practice, both as a measure and an equivalent, are to be ascribed. These two qualities can never be brought perfectly to unite and agree; for if the [money] standard coin were a measure alone, and made, like all other measures, of a material of little or no value, it would not answer the purpose of an equivalent. And if it is made, in order to answer the purpose of an equivalent, of a material of value, subject to frequent variations, according to the price at which such material sells at the market, it fails on that account in the quality of a standard or measure, and will not continue to be perfectly uniform and at all times the same. Civilised nations have generally adopted gold and silver as the material of their [money] standard coin, because these metals are costly and difficult to procure, little subject to variation in value, durable, divisible, and easily stamped or marked."

[1] 33 Vict. cap. 10, s. 4.

[2] 123·27447 grains in weight: $\frac{11}{12}$ths fine gold, $\frac{1}{12}$ alloy (33 Vict. cap. 10, first schedule). The reason for this special quantity is historical, and is founded on the quantity of gold contained in the guinea.

for coinage; and it is important to remember that by the shillings and pence which form part of the *Mint price* are meant, not given quantities of silver or bronze, but the fractions of a gold sovereign which are known by these names. An ounce of gold is divided into three whole sovereigns and $\frac{17}{20}$ths and $\frac{10}{240}$ths and $\frac{1}{480}$th of a gold sovereign; and this is what is meant when it is said that the *Mint price* of gold is £3 17s. 10½d. So long, therefore, as the gold currency is in a sound condition, there can be no permanent or important variation between the market price and what is called the Mint price.

6. But we could not be sure that the gold sovereign would be of the value of the gold contained in it, if the Government had the power to increase or diminish the quantity of coined sovereigns at their own discretion, and thus to determine what quantity of currency the people shall use. It is therefore made incumbent on the Mint to coin into sovereigns all the gold which is brought to it for coinage. The quantity of coins in circulation must, therefore, depend entirely on the demand for them, and not on the action of the Government. If more coins are needed, gold is brought to the Mint and turned into coins. If fewer coins are needed, existing sovereigns are melted down and exported or otherwise used. The value of the coin must therefore be that of the gold used in making it, with nothing added but the value of the Government certificate of its weight and purity. *It is this self-acting character of the Mint which is the great safeguard of the coinage.* If it were in the power of the Government to refuse to coin, they would be able to restrict the coinage, and thus to add to its exchangeable value. If they were able to alter the quantity and purity of the metal contained in the

sovereign, they would be able to depreciate its value, as has in former times often been done. In either case they would be able to derange markets and alter existing contracts, which are made in terms of the sovereign or pound sterling. The self-acting character of the Mint operations reduces the function of the State in issuing money to that of a verifier in weights and measures.

7. With regard to the silver coinage the case is different. The gold sovereign, it is obvious, or even the gold half-sovereign, is not suited for small payments; and attempts to issue a smaller gold coin, such as the gold 5-franc piece in France, have not been attended with success. In many countries paper money is largely used for the purpose of small payments, *e.g.* the paper dollar in the United States. But it is less convenient—or, at any rate, less suited to English habits—than metallic coin; and there is an advantage in having a subsidiary coin made of a substance which has some value of its own. For these reasons, amongst others, it has been found desirable to use a metal of larger bulk and smaller value than gold; and silver is the metal used for the purpose.

8. By royal proclamation the gold sovereign is equivalent to twenty shillings, or, in other words, is divided into twenty parts called shillings. Previously to 1816 the weight of standard silver contained in a shilling was 92·90 grains, making the relative value of a given weight of silver to the same weight of gold as 15·21 to 1. In 1816 the weight of standard silver contained in a shilling was reduced to 87·27272 grains —a reduction of about 6 per cent.[1]

[1] See the present Coinage Act, 33 Vict. cap. 10, s. 3, first schedule. According to this Act, the weight of silver in a shilling is, as above stated, 87·27272 grains; the fineness $\frac{37}{40}$ths of fine silver to $\frac{3}{40}$ths of alloy.

9. The effect of this alteration was, at the then market value between gold and silver, to make the value of the shilling measured in gold rather more than the value of the silver of which it was composed. In other words, the shilling became a token-coin, the currency value of which was no longer the value of the silver contained in it, but the value of $\frac{1}{20}$ of a gold sovereign. There could, therefore, be no longer any motive for melting it down or exporting it. But since with free mintage of silver it would have been greatly to the advantage of owners of silver to bring it to the Mint—to get it coined into shillings—and to pay their debts with the shillings so coined, two precautions were taken. The right of private persons to have silver freely minted for them, which had been actually suspended for many years, was finally put an end to, and *the right to mint silver coins was confined to the Government.* The second precaution was to limit the operation of the law of legal tender. Under that law, as it formerly existed, either gold or silver coined by the king's authority could be offered in payment to any amount. But under the Act of 1816 silver was allowed to be legal tender for the amount of 40s., but for no greater amount. Under this state of law new supplies of silver coin cannot be procured except with the consent and by the act of the Government, and silver coin cannot be used for the purposes of large payments.

10. *The immediate effect of the Act of* 1816 *was the resumption of the coinage of silver, which it had been found necessary to suspend under the mischievous operation of the old Bimetallic Law*, and thus to provide the country with an adequate supply of small change, the want of which under that law had proved to be a very serious evil. Very large amounts of silver were coined

in 1816 and the years immediately following, and there has been a fairly steady coinage ever since; in fact, just as much as was wanted to supply the needs of the people for small coin.[1]

11. Since 1816 the gold value of silver has declined, and the ratio—which was then about $15\frac{1}{2}$ to 1—is now about 30 to 1: so that the difference between the value of the silver contained in a shilling and the value of $\frac{1}{20}$th of a gold sovereign, is far greater than it was at the time when silver was first made into a token-coin. One consequence of this is that the Government makes a very large profit on the coinage of silver, since every ounce of silver—which they now buy for about 2s. 6d. an ounce—they issue, when turned into silver coins, at 5s. 6d.

12. The silver coins are not, therefore, a measure of value at all; they are a token-coinage, only used for small transactions. And when a silver coin is spoken of as denoting the price of any article, what is meant by it is the fraction of the gold sovereign to which it corresponds. If we say that mutton is worth a shilling a pound, we mean that a pound of mutton is worth $\frac{1}{20}$th of a gold sovereign. If we say that wheat is 50s. a quarter, we mean that a quarter of wheat is worth two gold sovereigns and a half. Under this system the action of the Government in respect to silver coins differs entirely from its action in respect to gold coins. *In the case of gold coins the Mint is obliged to coin all the gold which is brought to it; in short, to turn all the*

[1] Continued by the present Coinage Act, 33 Vict. cap. 10, s. 4. Under the operation of the Bimetallic Law, which permitted free coinage of both metals, very little silver was coined during the eighteenth century. The coinage of silver was suspended by law in 1798, and was not resumed till 1816. Since 1816 the aggregate coinage of silver has been about £41,000,000, or, on an average, over £500,000 a year.

gold brought to it into gold coins. In the case of silver it is not under any such obligation.

13. The supply of silver coins needed for the retail dealings of the country is easily effected through the banks. When they find that their customers want silver, they demand it through the Bank of England from the Mint, and pay for it in gold coins. They have no motive to ask for more than is really wanted by the country as silver currency ; for the silver in the coins would be worth less if melted down for use in the arts or for exportation than it is worth as silver coin. The Mint buys the silver needed to make the required coin, and gains a profit by the difference between the market value of the silver and the price in gold given for it. But, as they only issue it in accordance with the demands made for it by the bankers, they do not issue more silver coins than the people need.

14. In order that the Mint may perform its function of verifying the quality of the gold and silver used in coinage, there must be a standard of quality. This is found in certain plates of gold and silver which are kept with other standards by the Board of Trade, and which are produced annually on what is known as the Trial of the Pyx, when a jury of the Goldsmiths' Company compares samples of the metals used by the Mint in coinage with the standard plates. These standard plates were formerly kept in a chapel opening into the cloisters of Westminster Abbey, called the Chapel of the Pyx, in which the king's treasures used to be stored, and on the door of which is still to be seen a trace of the skin of a malefactor flayed alive for trying to rob the king's treasury. The Board of Trade wished to hand this chapel over to the Dean and Chapter, within whose precincts it lies; but the late

Dean Stanley characteristically refused to receive it, on the ground that the retention of this interesting spot in the precincts of the Abbey by a department of the State which has to do with the regulation of trade was a symbolic link in the relations of the State to the Church.

15. What is true of silver is also generally true of the copper—or, rather, the bronze—coinage. The metal employed in the bronze coin is worth less than the fraction of the gold sovereign which it is used to express, and it is not a legal tender for more than 12d. The Mint issues it from time to time in different districts, and contracts the issue when it is found to be superabundant.

16. It will therefore be seen that *gold is the sole ultimate measure of value in this country*, and that its value as compared with other commodities is determined precisely in the same way as that of other commodities, viz. by supply and demand; in other words, its value is the value which people will give for it. The sole function of the Government is to ascertain the quality and weight of the gold, and to give it a stamp denoting that quality and weight. Other coins are measured in gold, and do not pass according to their own intrinsic or market value; they are tokens, not articles of commerce. The function of the Government with respect to them is to supply any number for which the corresponding price in gold is given; to verify the quantity and quality of the metal they contain, and to stamp them accordingly. *The system of currency thus described has solved two great difficulties.* First, it has adopted as material of the coin which is freely minted and which forms our measure of value one and not two metals—so that the evils of a constant alternation between gold and silver, and of

the frequent expulsion of the one by the other, under what is known as Gresham's law,[1] have been put an end to. How great were these evils may be easily learned by those who will read history, not through Bimetallist spectacles, but by the light of the facts themselves.[2] In adopting this standard it does nothing but stamp the coin with a certificate denoting the quantity and quality of the gold which it contains, and it says that the coin so stamped shall be accepted as being what the Government state it to be. It says nothing of the value of the coin, but leaves that to be determined—as all other values are determined—by the higgling of the market.

17. Secondly, *it has reconciled with the adoption of the single metal, gold, as the sole standard of value, the free use of as much silver coin as men need for use as a medium of daily exchange*. It is clear, as above stated, that gold coins are not suited for small daily payments —wages, travelling fares, and the like; and very great inconvenience has often been felt in Bimetallic countries when, in consequence of the operation of the Gresham law, silver coins have been melted down or have left the country. Since the reform of the coinage in 1816 no such inconvenience has been felt, or, if felt, it has been promptly remedied.

18. To make the system theoretically perfect, two things ought, perhaps, to be done. It is conceivable that the Government, which has the coinage of silver in its own control, might refuse to coin silver when really needed. It is not likely so to refuse, because,

[1] "Bad money drives out good" is the popular statement of Gresham's law. In other words, if you give people the alternative of paying in either of two things, they will pay in the cheapest.

[2] Those who care to see what Bimetallism has done for the nations which have adopted it may be referred to Mr. Shaw's *History of Currency* (Wilsons and Milne, 1895).

so long as silver is overvalued in the coins, the Government makes a large profit by the coinage of silver. But there would seem to be no reason why, so long as silver is thus overvalued, the Mint should not be obliged to give twenty shillings in silver for every gold sovereign brought to it. There would be no fear of an over-issue, for no one would give a gold sovereign for twenty shillings—the silver in which is worth much less than a sovereign—unless he meant to use them as change. A more probable danger might arise from an over-issue of silver coins, if we could imagine that our Government were disposed to make money by such a device. Such an abuse might be checked by making the token-coins what they really are, viz. promises to pay gold, and by compelling the Government to redeem them in gold at their face-value. Supposing these two additional precautions to be adopted, the principle on which our token-coinage is founded would be carried out completely, and the action of the Government with respect to it would be, as it is with respect to our gold coinage, purely automatic.

19. *Our present system possesses a further convenience.* The gold sovereign, or pound sterling, unites in itself three characters : it is the measure of value ; it is also the current coin ordinarily used by the people as pocket-money ; and it is the unit of account in which all the dealings of the country, and most of the dealings of the commercial world, are carried on. This is an advantage not possessed by other nations with a gold standard—*e.g.* the United States, where a gold dollar is rarely, if ever, seen ; and France, where there is no such thing as a gold franc.

20. From the above account of our coinage, it will be seen how inaccurate it is to speak of our law of

1816 as having "demonetised" silver. In fact, it had the opposite effect. It finally took from it the possibility of ever becoming the standard metal, or measure of value, or of being used compulsorily in large payments. But in so doing, it made the use of silver in the form of subsidiary and token-coins convenient and secure by placing them under conditions which offered no inducement to melt them down or export them; so that, as a matter of fact, silver—which was scarce and little used in this country before 1816—has since the change in the law been largely coined and used. *The importance of the principle of a subsidiary silver token-coinage, first embodied in the English currency reforms completed by the Act of* 1816, *may be illustrated by the great extension which the principle has received in other countries in later years.* It was estimated by the Gold and Silver Commission (Final Report, Part II., par. 56) that out of £392,150,000 of silver in use as money in Europe and America in 1885, more than three-fourths was subsidiary silver currency maintained at an artificial gold value. In the report of the Indian Currency Committee (pars. 67 to 96) is contained an analysis of the currencies of the principal countries of the world. This analysis shows how comparatively small is the actual quantity of gold coin in the currencies of nations which successfully maintain a gold standard at par; and how large is the part successfully played by silver token-coins and other subsidiary forms of currency.

21. The particular cases are too long to be described at length here, but special reference may be made to the enormous quantity of silver kept in circulation at a gold value in Germany, France, and the United States, and to the case of Holland and its colonies,

where there is a successful gold standard with a circulation of paper and of silver—inconvertible except for export. It is also worthy of notice that these subsidiary currencies are maintained at a gold value by closing the Mints to the free coinage of silver and without the further precautions taken in our own case. Experience drawn from these cases suggests that the future development of the currencies of different nations, and the remedy for any difficulties which may arise either from the growing need of a single standard of value throughout the world, may be found in the extension of credit and in a free use of token and subsidiary currencies coupled with the single gold standard, rather than in a *hopeless attempt to tie gold and silver together by a marriage of which Nature has forbidden the Banns.*

ENGLAND'S ADOPTION

OF THE

GOLD STANDARD

II

ENGLAND'S ADOPTION OF THE GOLD STANDARD[1]

Written for the Gold Standard Defence Association, 1895.

1. THE character and operation of our present metallic currency have been explained in Leaflet No. 7 (No. 1 above). The following is an account of the steps by which we arrived at our present Gold Standard. *The story begins with the coinage of the guinea in the second half of the seventeenth century.* Previous to that time the history of English coinage is a record of arbitrary changes made by kings and governments in the weight and fineness of the coins, or in their relation to one another, or in the rate at which they were to be received in payment: changes made for various purposes, *e.g.* to cheat creditors; to provide sufficient currency;

[1] For the facts and extracts given I am indebted to Lord Liverpool's letter on the Coins of the Realm, ed. 1880; to the Appendix to Dana Horton's *Silver Pound;* to the Appendix to Gibbs' *Colloquy on Currency;* to Shaw's *History of Currency*, 1895; and to Kalkman's *England's Übergang zur Gold währung im 18th Jahrhundert*, Strassburg, 1895. I am also indebted to Mr. Edward Rigg, of the Royal Mint, for the figures relating to coinage, and for valuable criticisms.

or to meet and counteract the constant fluctuations in the relative outside or market values of gold and silver.[1]

2. Subsequently to the coinage of the guinea wiser counsels prevailed under the advice of Locke and others, and no arbitrary change in the weight of the guinea was made from 1670 until the guinea was replaced by the sovereign in 1816. When that was done, the sovereign, or £ sterling—which, as the unit of account, had long been $\frac{20}{21}$ of a guinea—was coined so as to contain $\frac{20}{21}$ weight of the gold which a guinea had previously contained. *The guinea is therefore the foundation of our present gold system.*

3. At the time when it was first coined the king had the right to fix, by proclamation, the weight, fineness, and denomination of all coins, and all gold and silver coins issued by the royal mint were receivable in payment to any amount. But though both gold and silver coins were thus current, silver was the sole legal tender;[2] and was also in common opinion, as it had originally been in fact, the standard metal; and this opinion, as we shall see, exercised great influence on the course of events.

4. In 1666 an Act[3] was passed, under which the mint was made open to both metals and every one was entitled to have any quantity either of gold or silver turned into coin. This law continued in force until 1798, with the exception of a few months in 1696. The weight of the guinea was, under the Mint Indenture of 1670, to be at the rate of $44\frac{1}{2}$ to a pound troy of gold. Its value in silver was to be 20s., apparently on the ground that this ratio represented the relative

[1] Shaw, p. 160.
[2] Adam Smith, 9th Ed. b. I., p. 59. Ricardo, Ed. 1876, p. 224. Jevons, Money, p. 98.
[3] 18 Charles II., ch. 5. Dana Horton, p. 230.

value of gold and silver in the two coins, which, as a matter of fact, it never did.[1] The mint rate was not acted on or enforced. It appears to have been the policy of the government to treat gold as subsidiary to silver, and to leave the guinea to find its own value in silver money. At any rate, the public were allowed, without interference by the government, to put their own rate upon the guinea, and it rapidly rose in value —becoming in 1695-6 worth as much as 30s.[2] For this rise there were various reasons. The most important was the state of the silver coin, which by clipping and waste had become so bad as to lose half its original weight and value. But this was not the only reason. Gold was becoming more abundant and cheaper in the markets of the world, and possibly on this account, and possibly also, as Lord Liverpool thought,[3] on account of its greater convenience, people preferred gold. It is probable that there was also unhealthy speculation in guineas. *Speculation in the price of gold and silver, disastrous to all but money changers, has always been the result of past Bimetallism.*[4] The consequence of this state of things was that there was a great import of gold; that all good silver coins were melted down, hoarded or exported; that there was a terrible scarcity of silver coin; that no one knew what was the value of the current silver coin; that all ordinary dealings were plunged into confusion; and that the value of English money abroad—in other words, the Foreign exchanges—fell heavily. The first remedy proposed and adopted was to call in and re-coin the bad silver money, which, as above stated,

[1] Liverpool, p. 78. Dana Horton, ch. vi.
[2] Dana Horton, App., p. 238. Liverpool, pp. 89, 157.
[3] Liverpool, pp. 92, 154.
[4] Shaw, *passim.*

was still regarded by the public, as well as by the highest authorities, as the standard money of the country. This step, as is known to every reader of Macaulay, was a step of first rate importance. It was taken on the advice of very able men, and is said to have cost the country £2,700,000, a vast sum for those days.[1] Nor was this the only step taken. Orders were made from time to time by the Treasury fixing and gradually reducing the MAXIMUM amount in silver at which the guinea should be taken at the public treasuries;[2] and statutes were passed reducing the MAXIMUM rate in silver at which guineas should be taken by the public. In 1696 the MAXIMUM silver price of the guinea was reduced by statute to 26s., and afterwards to 22s.[3] In the same year a still more stringent measure was taken. The importation of guineas was forbidden by statute, and the mint was closed against gold.[4] This statute was, as has been noticed above, only in operation for a few months and was repealed in the following year.[5] In 1697 the Treasury gave notice that they would not receive guineas at more than 21s. 6d., but no guineas were brought in, and in a few days the Treasury directed them to be again received at 22s.[6] In 1698 a report of the Commissioners of Trade, signed amongst other persons by Locke, was issued, which, after recommending a further reduction of the rate, sustained that

[1] Lord Liverpool, pp. 85, 92 The whole National Revenue in the reign of Charles II. did not amount to a million and a half. (Macaulay, i. 298.) The Revenue from taxes in 1688 was between £1,600,000 and £1,700,000. (Dowell, *History of Taxation*, ii. p. 43.)

[2] Dana Horton, pp. 240, 248, 249, 253.

[3] 7 and 8 William III., c. 10 and 19. Dana Horton, pp. 243, 245.

[4] 7 and 8 William III., c. 13. Dana Horton, p. 244.

[5] 8 and 9 William III., c. 1. Dana Horton, p. 247.

[6] Dana Horton, pp. 248, 249.

recommendation by the following instructive passage:—"This appears to us the most convenient way, because it may at all times be a ready and easy remedy upon any variation that shall happen in the price of gold, or even in case this now proposed coining of guineas should not prove sufficient: *For it being impossible that more than one metal should be the true measure of commerce; and the world by common consent and convenience having settled that measure in silver, gold as well as other metals is to be looked upon as a commodity which, varying in its price as other commodities do, its value will always be changeable; and the fixing of its value in any country, so that it cannot be readily accommodated to the course it has in other neighbouring countries, will be always prejudicial to the country which does so.*"[1]

5. The report then proposes to reduce the rate of the guinea to 21s. 6d., which, though not quite so low as the rate in neighbouring countries, will, the commissioners think, "with the addition of costs of coinage, etc., be sufficient to stop the excessive importation of gold." The MAXIMUM rate was accordingly reduced to 21s. 6d., and so continued. But gold was still imported and coined into guineas; and the price which could be obtained for a given weight of silver bullion continued to be greater than the sum in silver coins into which it was coined at the mint; or, in other words, the market price exceeded the mint price. No private person brought to the mint silver for which he could get a larger price elsewhere; and the new silver coins, which were more valuable as bullion than as coins, were melted down and exported. *England was stripped of her good silver and the cost of the new*

[1] Dana Horton, p. 252.

coinage was entirely thrown away. Such were the results of the Bimetallic system. This state of things continued till 1717, when Sir Isaac Newton made his celebrated report, in which he pointed out that whilst the guinea passed for 21s. 6d. in England, it was in the market—that is to say, in foreign countries—worth only 20s. 8d., and recommended that 6d. should be taken off and that it should be rated at 21s.[1] This was accordingly done. In 1718 the guinea was rated by proclamation and by a new mint indenture at 21s., and appears to have been so received by the public.[2] But the steps thus taken had little or no effect on the state of the currency. Gold was still freely brought to the mint and coined into guineas; little, if any, silver was brought to the mint; and there was throughout the last century and down to 1816 a great dearth of silver coin in this country.[3]

The coinage of gold and silver in the various reigns from Charles II. to 1816 was as follows:—

	Gold.	Silver.
	£	£
Charles II. (1660–1685)	4,672,768 ... (1667–1685 only in Mint Records.)	3,272,311
James II. (1686–1688)	1,659,026 ...	386,675
William and Mary (1689–1694)	482,342 ...	115,895
William III. (1695–1701) ...	3,044,428 ...	7,014,047
Anne (1702–1714)	3,128,710 ...	530,608[4]
George I. (1715–1727)	8,115,152 ...	229,905
George II. (1728–1759)	11,034,979 ...	304,288
George III. (1760–1815)... ...	67,970,181 ...	64,625

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[1] Liverpool, p. 93. See for other reports by Sir Isaac Newton, Dana Horton, pp. 261 271.

[2] Liverpool, p. 95.

[3] Liverpool, p. 206; Shaw, p. 231; Kalkman, p. 64.

[4] Of this amount, £320,373 was struck at the Edinburgh Mint, in pursuance of the Treaty of Union.

Appended to this paper is a return giving the coinage of gold and silver in each year from 1700 to 1816, when the present system was introduced. It will be seen from these figures that with the exception of the new coinage in William the Third's reign, amounting to £7,000,000, all, or almost all, of which disappeared, there was little or no silver coined from 1700 down to the introduction of the token silver coinage in 1817.

6. Shortly after the middle of the eighteenth century the gold coin, which had become abundant, and was in fact the current coin of the country, had fallen into a very defective condition; the market price of gold bullion exceeded the price in sovereigns given for it at the mint, and the Foreign exchanges fell. In 1774 the defective gold coins were called in and re-issued, a step which was followed by complete success.[1] The mint price became equal to the market price; the Foreign exchanges rose, and the gold coin remained in the Kingdom. At the same time an Act was passed providing that, for sums above £25, silver should be legal tender, not according to the face value of the coin, but according to its actual weight or contents—viz. at 5s. 2d. per ounce.[2] This Act, important as it has been considered in a theoretical point of view, was probably intended, not so much to depose silver from its rank as the standard metal, as to obviate the defects of the silver coins. It had little practical effect, since little silver coin was current, and all large payments were already made in gold. But in or about 1797 a change occurred in the relative market or outside values of gold and silver. From the time of

[1] Liverpool, p. 194; Shaw, p. 233; Kalkman, chap. iv.
[2] 14 Geo. III., c. 42. Shaw, p. 235.

the introduction of the guinea down to the close of the last century the value set upon gold in England was higher, and that set upon silver was lower than in the outside markets of the world, and the consequence was that gold flowed into England and that silver flowed out of England. But towards the close of the century the production of silver increased, and the balance was changed. According to Soetbeer, the market ratio of gold to silver was 15·27 in the decade 1701–1710, and fell steadily to 14·64 in 1771–1778. From that time it began to rise, and in 1801–1810 reached 15·61, which was considerably higher than the 15·2 which corresponded to the ratio of the guinea at 21s.[1]

7. Measured by the English standard, silver was becoming the cheaper metal, and if the English law had remained unaltered gold would have flowed out of England and silver would have flowed in. Consequently, and no doubt for the purpose of preventing such a change, the Act of 1774, limiting the character of silver as legal tender (which had been allowed to drop) was revived in 1798–9; the free coinage of silver was suspended,[2] and remained so suspended until 1816, when our present system was finally established. Under that system, the effect of which is fully explained in Paper No. I above, *gold became the sole legal standard metal as it had previously been the actual standard.* The sovereign, containing in weight $\frac{20}{21}$ parts of a guinea, became at once both the standard of value, the gold coin in current use, and the unit of account. The mint was and remained freely open to gold; and gold sovereigns were, and remained still, legal tender to any amount.

[1] *Report of Gold and Silver Commission*, Vol. II., App., p. 162.
[2] 38 Geo. III., c. 59, continued by 39 Geo. III. c. 75.

On the other hand, the right to coin silver was confined to the government. The bullion contents of the silver coin were purposely made less in value than the face value of the coin; and silver coins were made legal tender for forty shillings, but for no more. The provisions of the Act of 1816 were re-enacted by the coinage Act of 1870.[1] From 1816 silver has been regularly coined, in pursuance of the public demand for silver token coin, at an average amount of half a million sterling a year. During the same period £307,000,000 of gold has been coined, an average annual amount of £3,886,000. It must be remembered, in considering the figures, that whilst the mintage of the standard coin—in this case gold—does not necessarily represent a demand for currency, since gold coins, being equivalent to bullion, are constantly melted down and exported, the mintage of token silver coins does represent a real permanent demand for silver currency, since those coins, being more valuable as coin than as bullion, remain in use as coin, and are not melted down or exported.

8. The above are the facts. The lesson they teach has been so much misrepresented that it is worth while to make a few observations on them. *To read Bimetallic literature one would suppose that the free coinage of Silver was an inestimable blessing; that the English people really enjoyed it until* 1816, *or at any rate until* 1798; *and that it was then taken from them by the arbitrary action of gold currency faddists, of whom Lord Liverpool was the chief.*[2] *There cannot be a greater travesty of history.* The merit of Lord

[1] 33 Vict., c. 10.

[2] See Dana Horton's *Silver Pound*, passim; Gibbs' *Colloquy on Currency*, p. 271.

Liverpool was not that he invented a new Currency Theory; but that he had a true insight into what had long been the actual fact, and that the course he advised adapted legislation to the facts. It is true that by law the mint was open to silver until 1798, but it was open to silver under conditions which in the then state of the market prevented silver from being brought to it. The metal which the people freely bring to the mint to be coined is the metal which constitutes the standard coin, and is the measure of value. A metal which may by law be coined, but which nobody desires to have coined, is as little the standard as a metal which the law forbids to be coined. Gold became our standard because people brought it to the mint to be coined. Silver ceased to be the standard because they did not. This process began at a time when the law favoured neither metal, when silver was the acknowledged standard, and the sole legal tender, and when the people were free to put what silver value they pleased upon gold guineas. It is not the fact, as Mr. Gibbs (now Lord Aldenham) says,[1] "that the alterations of the Rates which caused the banishment of the silver coin were made from time to time by Orders in Council addressed to the mint." The exact opposite was the case. *The over-valuation of the guinea which caused the banishmeut of the silver coin was the act of the people.* The various acts of the government prior to and including the proclamation of 1717 were all in the direction of reducing that over-valuation. They all placed a MAXIMUM limit on its value; and it was not till the order of 1717, issued on the advice of Sir

[1] *Colloquy on Currency*, p. 273. See also Foxwell, evidence before Agricultural Commission, 23, 8267.

Isaac Newton, that a minimum as well as a maximum value was placed on it, and that the guinea was actually rated at a fixed amount. The people no doubt placed an extremely high value on the gold coin; the chief reason for which was probably the bad state of the silver coin. But this was not the only reason. When the silver coins were called in and recoined, at their full weight in silver, people still preferred the gold coins, and the new silver coins were melted down and exported. "But," say the Bimetallists, "this would not have been the case had the gold coins been properly rated down to the silver coins." Well, the experiment of rating *down* the gold coin was tried, and the guinea was actually reduced from 30*s.* or 31*s.*, its highest silver price, first to 21*s.* 6*d.*, and afterwards, on Sir Isaac Newton's well-known report, to 21*s.* Still people preferred the guinea; the guinea was worth more here than it was worth abroad; silver was worth less here than it was worth abroad; no silver was brought to the mint and good silver coin still left the country. "Ah!" say the Bimetallists, "this was all the fault of the government. Had they but rated the guinea lower still, they would have succeeded in keeping their silver." But is not this fact the surest evidence that the people would not part with gold? *The authorities wished to keep their silver; but they wished to keep it without losing their gold; a thing which the operation of the Bimetallic law rendered impossible.* The government, advised by the ablest economists, desired to retain silver; they believed silver to be still the standard; they lowered the rate of the guinea as far as they could; and they even took the step (but for a few months only) of closing the mint against gold. But further they did not and they dared not go. They either could not or would not put a

rate upon the guinea which would deprive people of its use ; a rate which would drive gold abroad and keep silver at home. Whether the government did not wish or did not dare to deprive the people of the use of guineas is really immaterial. The fact remains that they did not take the steps which they knew to be necessary for that purpose, and *gold remained the metal which was the cheaper in the market, which the people preferred, and which consequently became and continued during the whole of the eighteenth century the current coin and the measure of value.*

9. *Gold had thus, before the beginning of the eighteenth century, become the standard coin*, and so far as that coin was concerned no difficulty was felt. The re-coinage of the gold currency in 1774 was completely successful, and was attended by none of the evils which followed the re-coinage of silver in 1695-1699. The inconvenience suffered during the eighteenth century was of a different kind. It was a want of small change due to the fact that under the Bimetallic law which opened the mint freely to both metals, silver was not coined, and full-value silver was melted down and exported. Of the real inconvenience thus sustained we who enjoy abundant silver coinage under the law of 1816 can form little conception. For the rich to have no pocket-money with which to pay tavern bills, fares, or wages ; for the poor to be deprived of the ready money with which to buy all the necessaries of life, these are evils almost as great as the evils which attend a faulty standard. *And these evils were the inevitable result of the Bimetallic law.* The first person who seems to have suggested the true remedy was Sir John Barnard, of Stock Exchange notor-

iety.[1] He recommended that the weight of the silver coin should be reduced, so that it should become a token, and that it should not be legal tender. He also proposed that no more silver money should be coined than should be found necessary to make a free circulation of silver coin. Adam Smith, writing in 1776, saw that gold had become the standard, and he saw that it had become the standard in Locke's time, though Locke had never seen it himself. Adam Smith also suggested the over-rating of silver coin as the means of preventing its exportation.[2]

10. Finally appeared Lord Liverpool's famous letter on the Coins of the Realm.[3] He had been instrumental in the reform of the gold coinage in 1774, and was a member of the Commission which recommended the suspension of silver coinage in 1798. This letter appeared in 1805, but it was probably written much earlier. It is no doubt the foundation of the reform which was accomplished in 1816. Nor, so far as I can judge, have the Bimetallists succeeded in throwing any doubt on the substantial accuracy of his account of the introduction of the Gold Standard. Whether he does or does not attribute too much importance to the greater convenience of gold as a current coin, and to its greater stability, and whether he gives sufficient weight to the attempts at tariffing gold and silver coin which were made from 1695 to 1717, seem to me immaterial questions. The real point is that when the market was free, gold became over-valued in England, and that the Government, though desirous of retaining silver as the

[1] *Thoughts on the Scarcity of Silver Coin*, 1759. See Kalkman, p. 113.

[2] See passage quoted in Gibbs' *Colloquy on Currency*, App., xxxv.

[3] See especially chapter XVII.

standard, did not venture to stop the free coinage of gold, to under-value gold, or even to rate gold down to the rate which was current abroad. The failure of the attempt to keep both metals in circulation when not rated; the mischievous speculation in gold guineas; the futile attempts at tariffing under the advice of Locke and Newton; the loss of all the newly-coined silver in the seventeenth century; and the dearth of silver money in the eighteenth century; are illustrations of the evils of a double standard. They are also illustrations of the mistakes which Governments make, even when advised by the ablest men, when they attempt a task beyond their proper limits.

The facts given above are undoubted: and what they really show is a steady progress, conscious or unconscious, towards the adoption of a single Gold Standard, a progress due not solely or chiefly to the arbitrary acts of a Government, but to the wants and habits of the people, and to economical laws which neither Governments nor people can neglect with impunity.

APPENDIX TO NO. II.

Return of Gold and Silver Coined from 1700 to 1815.

Year.	Gold Coined.	Silver Coined.
	£	£
1700	126,223	14,898
1701	1,249,520	116,179
1702	170,172	355
1703	1,596	2,226
1704	Nil.	12,422
1705	4,859	1,332
1706	25,091	2,889
1707	28,362	3,639 London. 320,373 Edin.[1]
1708	47,192	11,628
1709	115,317	78,811 [2]
1710	173,630	2,533
1711	435,663	76,781 [2]
1712	133,400	5,532
1713	613,826	7,232
1714	1,379,602	4,855
1715	1,826,480	5,093
1716	1,110,420	5,115
1717	709,566	2,939
1718	140,642	7,114
1719	688,960	5,444
1720	885,859	24,279
1721	272,500	7,170
1722	594,716	6,147
1723	388,098	149,107 [3]
1724	273,809	5,121
1725	58,360	7,735
1726	872,963	2,592
1727	292,779	2,049
1728	53,874	2,644
1729	Nil.	6,370
1730	91,628	3,478
1731	305,768	2,182
1732	373,473	2,620
1733	833,948	3,580
1734	487,108	4,929
1735	107,234	3,460
1736	330,579	5,310
1737	67,284	3,720
1738	269,837	Nil.
1739	283,854	10,528
1740	196,245	Nil.
1741	25,231	9,486
1742	Nil.	Nil.
1743	Nil.	7,440
1744	9,812	7,837
1745	292,966	1,860
1746	474,492	136,431 [3]
1747	37,146	4,650
1748	338,523	Nil.
1749	710,687	Nil.
1750	558,597	Nil.
1751	450,663	8,103
1752	572,657	58
1753	364,876	59
1754	Nil.	59
1755	224,690	59
1756	492,983	121
1757	Nil.	16,613

Year.	Gold Coined.	Silver Coined.
	£	£
1758	651,814	62,586 [3]
1759	2,429,010	105
1760	676,231	133
1761	550,887	31
1762	553,691	3,162
1763	513,041	2,628
1764	883,102	15
1765	538,272	19
1766	820,725	298
1767	1,271,808	Nil.
1768	844,554	Nil.
1769	626,582	Nil.
1770	623,779	68
1771	637,796	Nil.
1772	843,854	335
1773	1,317,645	Nil.
1774	4,685,624	Nil.
1775	4,901,219	Nil.
1776	5,006,350	315
1777	3,680,995	Nil.
1778	350,438	Nil.
1779	1,696,118	254
1780	Nil.	Nil.
1781	876,795	62
1782	698,074	Nil.
1783	227,083	Nil.
1784	822,126	203
1785	2,488,106	Nil.
1786	1,107,382	Nil.
1787	2,890,457	55,459
1788	3,664,174	Nil.
1789	1,530,711	Nil.
1790	2,660,521	Nil.
1791	2,456,567	Nil.
1792	1,171,863	252
1793	2,747,430	Nil.
1794	2,558,895	Nil.
1795	493,416	295
1796	464,680	Nil.
1797	2,000,297	Nil.
1798	2,967,505	Nil.
1799	449,962	Nil.
1800	189,937	Nil.
1801	450,242	53
1802	437,019	62
1803	596,445	72
1804	718,397	78
1805	54,668	183
1806	405,106	Nil.
1807	Nil.	108
1808	371,744	Nil.
1809	298,947	115
1810	316,936	121
1811	312,263	Nil.
1812	Nil.	53
1813	519,722	90
1814	Nil.	161
1815	Nil.	Nil.

[1] Coined in pursuance of the Treaty of Union, Liverpool, p. 91.

[2] Both coined from plate brought to the mint in pursuance of special arrangements, Liverpoo p. 91.

[3] The exceptionally large silver coinages of 1723, 1746, and 1758, seem, from the records of mint, to have been also due to exceptional causes.

BIMETALLISM

AND

LEGAL TENDER

III

BIMETALLISM AND LEGAL TENDER

Written for the Gold Standard Defence Association, 1895

"The Mint would again be opened to the coinage of gold and silver into LEGAL TENDER money at a defined ratio."—*President of Bimetallic League.* TIMES, *4th September*, 1895.

I. BIMETALLISTS PROPOSE :—

(*a*) THAT every nation shall coin freely both gold and silver.

(*b*) That every nation shall agree to make a law under which either so much gold, or so many times its weight in silver, shall be *legal tender* for every promise to pay; and that every debtor shall be able to pay a debt at his pleasure in either gold or silver coin at a ratio which the Bimetallists themselves, though obviously desiring the ratio of $15\frac{1}{2}$ to 1, do not venture to specify, and which, though the very kernel of their scheme, they relegate to statesmen to wrangle out at an International Conference. In other words, the law will force people, in the absence of special stipulations to the contrary, to accept unlimited quantities of either one metal or the other in payment of debts, *and will in so doing make a contract for people which they do not*

make for themselves; and this they do by means of legal tender. It is therefore desirable to understand what legal tender really means—what our law of legal tender is; what it has done; and what it can be expected to do with advantage.

2. What, then, is the law of legal tender in this country? It seems that according to English Common Law as declared by the courts, gold and silver coins issued from the Royal Mint were legal tender to any amount at the rates fixed by Royal Proclamation. Where no such rates were so fixed, as between 1670 and 1717, silver alone possessed the full quality of legal tender.[1] From 1717 to 1816 both gold and silver were nominally legal tender at the rate of one guinea to 21s., though gold alone was, in practice, the real standard coin. By the Coinage Act of 1816, practically re-enacted in the Coinage Act of 1870, gold sovereigns are legal tender to any amount, whilst silver coins are legal tender to the amount of 40s., and no more. Bank of England notes are legal tender everywhere except at the Bank of England, but as they are always convertible into gold at the Bank, they are really not legal tender at all. *The privilege or power of legal tender is therefore in this country, for everything except small payments, confined to gold sovereigns.*

3. The law of legal tender has practically no effect on International dealings. If a bill is drawn in New York on London, American dollars are legal tender for the purchase-money of the bill in New York, and English sovereigns are legal tender for the discharge of the bill in London. But as there is no international legal tender law fixing the number of dollars which

[1] See for the opinions of Adam Smith on this point, *Wealth of Nations*, 9th edition, Book I., p. 59, and of Ricardo, *Works*, ed. 1876, p. 224.

shall be paid for a sovereign, the number of dollars or of sovereigns to be paid for a bill is settled by private contract based upon the number of dollars which the market will give for a sovereign. The international dealing, therefore, is settled according to market values, and there is no question of legal tender in the matter.

4. Again, in the bulk of transactions within this country, those, namely, which are settled by cheques or by set-off of debts, the law of legal tender has no operation. A cheque is not legal tender; the payee may refuse to accept payment until it is cashed by the banker. A set-off is not touched by the law of legal tender. And yet from 90 to 100 per cent. of all transactions in this country are thus settled.

5. If a debt is paid in bank-notes other than those of the Bank of England they are not legal tender. Where a debt is paid in Bank of England notes, the notes are no doubt legal tender, except at the Bank of England; but at the Bank of England, to which they can always be taken, they must be paid in gold, so that they are not really or completely legal tender at all. But do they owe such debt-paying power as they have to their limited privilege of legal tender? Gold sovereigns are legal tender. But do they owe their debt-paying power—their circulating power—to this fact? Suppose that they ceased to be legal tender to-morrow, would not they—the law of contract remaining what it is—be still the recognised medium in which to pay debts? Would not people still make their contracts to pay and be paid so many pounds sterling? And would not the ordinary law enforce these contracts, without any special statute making gold sovereigns legal tender?

6. There is no doubt one case in which the law of legal tender has a direct and powerful effect, viz., the

case of subsidiary silver and copper coins. In this case, since the metal they contain is not as much as their face value in gold—since, for instance, the silver in a shilling is worth much less than the twentieth of a pound sterling—people would not receive them in payment unless the law attached an arbitrary and fictitious value to them by making them legal tender at their face value. And since the law gives them this fictitious value, it very properly limits their issue and also the amount for which they are legal tender, and thus prevents them from becoming the general medium of exchange in ordinary transactions. In fact, their function is a limited and subordinate one. For international transactions, for wholesale transactions, and for large transactions forming the bulk of retail transactions, they are needless and functionless. They are no measure of prices; they have no connection with the standard of value. And yet they are the only form of currency with respect to which our law of legal tender is really operative.

Do not these considerations lead to the conclusion that the law of legal tender is a thing of much less weight and value than is commonly supposed?

7. What, then, is this law of legal tender? What does it really mean? What does it add to our law of currency? *Legal tender is something which the law specially distinguishes as a thing to be accepted in payment of a debt.* It may be gold, silver, or paper—or indeed anything else. Or it may be all these or any combination of them. It is of course not at all the same thing as the Standard of Value, which like a lb. weight or a yard, is the term or unit in and by which values are stated and measured. In fact, legal tender is essentially different from the Standard of Value. Any nation or group of nations may adopt a standard

of value—say a certain unit weight of gold, and may make other things besides that unit legal tender. Indeed, if they make nothing else but the standard unit legal tender, there is no need and no room for the operation of any special law of legal tender. The ordinary law of contract does all that is necessary without any law giving special functions to particular forms of currency. We have adopted a gold sovereign as our unit, or standard of value. If I promise to pay 100 sovereigns, it needs no special currency law of legal tender to say that I am bound to pay 100 sovereigns, and that, if required to pay the 100 sovereigns, I cannot discharge my obligation by paying anything else. It is necessary to keep very clearly in mind the distinction between that function of law, or of government or of international agreement, tacit or expressed, which selects a standard of value, and that function which in creating legal tender professes to state in terms in what substance or substances a promise to pay may be discharged. The latter is a function superadded to the former, and superfluous and unnecessary if a promise to pay in terms of the standard unit is strictly performed.

8. What more, then, does the law of legal tender do? What has it done? What good, or what harm, has it done? And what can it do with advantage? It has enabled kings and Governments to put a smaller amount of pure metal into their standard coins, and to say that the coin thus reduced in real value shall be of the same effect in paying a debt as the original coin. Without saying that such debasement of the coin was always fraudulent, we shall all admit that the practice was, and is, in the highest degree inexpedient, and that such an application of the law of legal tender is indefensible.

9. Again, the law of legal tender has enabled Governments to say that an obligation to pay so many gold or silver units shall be satisfied by the delivery of bank-notes, or other especially sanctioned forms of inconvertible paper. Such a step is occasionally unavoidable under pressure of war or of other necessity; and when managed with skill and prudence, when the body which issues the paper possesses credit, and when care is taken not to over-issue, such a step may be taken for a short time without serious disaster. But these conditions are rare and difficult to secure; where they have been secured, care has always been taken to return to specie payments as soon as possible; and no reasonable man will be found to allege that this form of legal tender is a thing to be desired or encouraged.

10. Again, the law of legal tender has enabled Governments to say that the coin in which a promise to pay is discharged, may be either a gold coin of a given weight, or silver coins of (say) 15½ times its weight. And what has been the consequence? In every case one or other of the two—the cheaper for the time being—has become the standard coin in use; promises to pay have really been promises to pay that coin; and if in the course of events the other metal has become the cheaper, so as to make it better for debtors to pay in coins of that metal, the standard in use has altered from one metal to the other; the currency of the country has been exported to the benefit of no one but the money changers; and contracts have altered by the operation of the law over the heads of those who have made them.

11. Again, the law of legal tender has been operative, as above noticed, in the case of subsidiary coins, and will probably, if we may judge from the present state of the currencies of the world, have a much

wider operation with respect to subsidiary coins, than has heretofore been thought probable or possible. But since the metal of which this token coinage consists is in no sense the standard of value, and has no bearing on prices, we may, in considering the effect of legal tender on the standard of value, dismiss it from consideration. In fact, the man who receives a token coin receives, not so much silver, but such or such a fraction of a gold coin ; and if the silver coin were endorsed, as it ought to be, with a promise to exchange it for gold at its face value, and were made convertible into gold in the same manner in which bills cheques, and notes are convertible, its real character would be made obvious.

12. *Looking to the above cases of the use or abuse of the law of legal tender, other than the last, we see that they possess one character in common—viz., that the law in all of them enables a debtor to pay and requires a creditor to receive something different from that which their contract contemplated.* In fact it is a forced and unnatural construction put upon the dealings of men by arbitrary power. If applied to existing contracts, it may work the grossest injustice. If applied only to future dealings, so that men can understand what the construction of their contracts may be, it is less open to the charge of injustice, but cannot fail, if it has any effectual operation at all, to cause much confusion and inconvenience. An arbitrary and non natural construction of ordinary contracts is a great evil. It either makes men do what they did not intend to do, or it leads them to make special arrangements for the very purpose of evading the law.

13. Under these circumstances we may say that any Law of Legal Tender is in its own nature "suspect." And, as often happens with laws of this kind, it has

failed to operate in cases where it has not been in accordance with the habits or inclinations of the people. For instance, in the critical years at the end of the 17th century which ushered in our gold currency silver was the sole legal tender.[1] Silver was the old and acknowledged standard; both gold and silver were freely coined, but gold was not rated to silver, and, therefore, could not be legal tender. And yet the people preferred gold; brought gold to the mint to be coined, to the exclusion of silver; and used gold in payment and receipt of debts. Again, during the American Civil War, greenbacks were legal tender throughout the United States. But California steadily refused to use greenbacks; all contracts were made and performed in gold; and United States notes were not used in that State until the resumption by the United States of specie payments.[2]

14. The above considerations, drawn from past experience, appear to lead to the conclusion *that whilst the Bimetallic scheme is founded on the law of legal tender, the law of legal tender, except as regards subsidiary coins, is non-natural and questionable in principle.*

Do the present proposals of the Bimetallists alter these conclusions? The only new factor which they add to past Bimetallism is the suggestion that the legal tender of an alternative payment either in one metal or the other at a fixed ratio shall be a legal tender for all nations, fixed by international agreement, instead of a legal tender fixed by each nation for itself. But does this really alter the essentially objectionable character of legal tender? That char-

[1] See above, page 40.

[2] Appendix to Final Report of Gold and Silver Commission, No. V. p. 93.

acter consists in substituting for the free operation of voluntary contract, and for a law which simply enforces the performance of such contracts, an artificial construction of contracts such as would never occur to the parties unless forced upon them by an arbitrary law. Will this character of legal tender be changed by the fact that Governments agree with one another to make the substitution? Will individual men and women be induced thereby to think and deal in terms of alternative gold and silver, at some arbitrary ratio, instead of thinking and dealing, as they now do, in terms of one single and simple standard metal? Does not ordinary human nature rebel against such a suggestion? Is not all experience, in international dealings, in home trade, in domestic and private business, inconsistent with such an hypothesis?

Contrast the two formulæ:

1. I promise to pay 100 gold sovereigns.

2. I promise to pay either 100 gold sovereigns or as many silver dollars as will be equal in weight to $15\frac{1}{2}$ times 100 sovereigns, whichever of the two happen to be cheaper at the time of payment.

Which of these two formulæ will people naturally prefer? Which of them will a seller or borrower, or even a buyer or lender who looks to certainty and simplicity, select to do business in? Which of them will be the formula which will best grease the wheels of trade and promote numerous and profitable dealings? Can there be a doubt?

15. Is it not probable—nay, almost certain—that any such new form of legal tender—*i.e.* of an attempt by Governments to enforce a non-natural and objectionable mode of discharging obligations, would be followed by the same mischiefs and inconveniences which have followed other forms of legal tender—viz.

by injustice and confusion, and probably also by special private arrangements which would evade an arbitrary law by making all promises to pay payable in gold and in gold only? If so, the new Bimetallic law of legal tender would, like other forms of legal tender, be set aside in favour of natural dealings; but not without much inconvenience, and not without a conflict between law and habit which a wise legislator always endeavours to avoid, and which is happily avoided in our present monometallic gold system of currency.

16. To sum up. Under our present system the Government exercises two functions—it selects, not without reference to habit, the material of the standard coin, and it stamps the coin with a certificate of weight and fineness, leaving people to make their own contracts in terms of that coin—just as they make their contracts in quarts, feet, or gallons, or in avoirdupois pounds or hundredweights. The Bimetallic proposals would add to these functions a third, viz. that of determining the value of gold in silver, or of silver in gold, and they would do this by means of *legal tender, a law which cannot govern the supply of these metals at all; a law which can affect only that part of the demand for them which relates to currency; a law which, so far as the standard coin is concerned, is quite unnecessary; a law which, as history shows, has been generally used for fraudulent or questionable purposes, and with mischievous results.*

WHAT DO WE PAY WITH?

OR,

GOLD, CREDIT, AND PRICES

PREFACE

THE following papers were originally written for the use of the Gold and Silver Commission. Out of the many points which that Commission had to consider, they deal only with one—viz., the relation of gold to prices. But that point is one which involves abstract investigations of a very abstruse and difficult character, and which at the same time enters largely into the popular conceptions or misconceptions on which arguments for changes in our currency are founded. The simple theory that commodities are exchanged against gold and that prices depend upon the relative quantities of gold on the one hand and of the commodities to be bought with gold on the other, is a theory which still pervades the writings and speeches of careful thinkers; which underlies the recent alarm concerning the scarcity of gold; and which prompts the agitation for some measure which, by increasing the material of the currency, shall raise prices. In recent years the gold prices of many articles in Europe and America have fallen; or, in other words, there has been an appreciation of gold; and, as the annual supply of gold has at the same time fallen off, it is argued that the appreciation is due to a change in the supply of the metal, and it is inferred that the fall in price is due to a deficiency in the supply of gold. But before such an inference can be adopted as proved, we ought not only to be sure that the fall in price is not due to changes in the articles, but also to

know what, in the present state of business, is the real connection between gold and prices. It is to this very difficult point that the following observations are directed. They have no claim to be original. The "quantity theory" of the currency was directly attacked by Helferich in Germany as long ago as 1843,[1] and from the papers sent to the Royal Commission it would seem that it has been practically abandoned by many of the most distinguished of the Foreign Economists. In England it is to the writings and evidence of Mr. H. D. Macleod[2] and to Mr. Tooke's well-known *History of Prices* that I am chiefly indebted. I may refer especially to a letter in vol. ii., p. 369 of the last mentioned work, from Mr. James Pennington, well known formerly as a trusted adviser to the Treasury on currency matters, in which he expresses and explains the same views concerning the effect of bankers' deposits as currency which are given below.

Mr. Tooke's book is especially valuable at the present time, since, apart from controversy concerning the Act of 1844, it proves, by a careful analysis of facts, how strong has been the tendency, not only of ignorant or interested persons, but of able economists and politicians, to over-estimate the effect of currencies and currency laws, and to under-estimate the effect of real changes in things, of the actions of men, and of their

[1] Von den periodischen Schwankungen im Weit der Edeln Metalle von der Entdeckung Amerikas bis zum Jahren, 1830. J. Helferich, 1843.

[2] "*Theory and Practice of Banking*," by H. D. Macleod (Longmans, 1883). Second Report of Royal Commission, App., Questions 7174 to 7398 and Paper No. III. of same Appendix. Mr. Macleod has just published the first volume of a new work on the *Theory of Credit* (Longmans, 1889), in which he extracts, condenses, and illustrates what he has before written on this subject in a form which I have found exceedingly instructive and interesting, and even—if the word can properly be used of such a subject—amusing.

desires, hopes, and fears. This tendency is due partly to the vulgar error that a few lines in an Act of Parliament can satisfy human wants by making something out of nothing; partly to a more refined belief that currency is a form of property specially within State control; and partly also to the pleasure of speculating and legislating on those media of exchange which seem to pervade all sales and exchanges, and to bring them within the scope of philosophical generalisation.

A consciousness of temptations such as these would have led me to avoid writing upon such a subject at all if I did not feel that clear opinions upon it are much needed. The relation between the material of the currency and prices is one of the obscurest chapters in Political Economy. Some of our ablest writers make the subject darker by failing to recognise the changes which have taken place in the modes of carrying on business; whilst practical men are proposing alterations of our currency laws for the purpose of raising prices, without having realised their own entire ignorance of the extremely complicated and obscure relations with which they are dealing. To promote discussion on this abstruse subject is the chief object of this paper. What is it that the City deals in under the name of "money"? What is it we buy and sell with? What creates it? What limits it? These are the questions which it is my object to raise. It may not be possible at present to give any complete answer to them, but it is something to state them.

It is not without hesitation that I make the attempt. What the poet says of metaphysics is true of currency questions—

> "The intellectual being through *words* and *things*
> Goes groping on, a dim and perilous way."

I have added at the end some letters from and to

Professor Erwin Nasse of Bonn. The paper which he sent in answer to the questions of the Gold and Silver Commission (2nd Report, App., page 221), seemed to me so especially instructive that I resolved to obtain his opinion on the points raised in the following papers. On the subordinate points on which we are not in full accord his letters are full of instruction and suggestion; but I am glad to say that in the main we agree; and nothing has given me more confidence than the support of so great an authority.

T. H. Farrer.

Abinger,
August, 1889.

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IV

WHAT DO WE PAY WITH? OR, GOLD, CREDIT, AND PRICES

INCLUDING CORRESPONDENCE WITH PROFESSOR ERWIN NASSE, OF BONN, ON THE SAME SUBJECT

Written originally for the use of the Gold and Silver Commissioners

I.—PRELIMINARY.

MR. GOSCHEN AND MR. GIFFEN ON THE FALL IN PRICES.

MR. GOSCHEN, in an address delivered to the Institute of Bankers in 1883, called attention to the recent fall in certain wholesale prices, and ascribed it to an increase in the purchasing power of gold, caused by new demands on that metal coupled with a falling off in the supply. Mr. Giffen, in an article in the *Contemporary Review* of June, 1885, and also in his *Essays in Finance*, Second Series, 1886, on Gold Supply, the Rate of Discount and Prices, developed the same idea. Many others have followed these authorities, and several witnesses called by the Royal Commission have supported similar views.

EVEN ASSUMING THE QUANTITY THEORY, FALL IN PRICES MAY BE DUE TO THE ARTICLES SOLD, AND NOT TO GOLD.

The fact that the wholesale prices of certain things have fallen is beyond doubt; but, even assuming that price depends upon the proportion in quantity between exchangeable articles and gold, this is a very different thing from the proposition that the fall is due to scarcity of gold.

Let me explain what I mean by distinguishing the proposition (1) that *prices have fallen*; from the proposition (2) that *this fall is due to a scarcity of gold*; for it is a fundamental point.

"Fall in prices," "appreciation of gold," "increase in the purchasing power of gold," involve one another; indeed, they are only different forms of expressing the same thing. But they do not involve "scarcity of gold," and may, even if we assume the "quantity theory," arise from very different causes, as will be obvious from the following considerations.

Price is the mode we adopt of expressing value. Value is a relation between two exchangeable articles. All things are, according to the "quantity theory," assumed to be exchangeable with gold, and the gold price of each article is the expression of the relation for purposes of exchange between that article and gold in terms of gold. Now the relation between two articles for the purpose of exchange may be altered by an alteration in either of them, viz., by increased abundance of the one or by increased scarcity of the other, or by both causes. Suppose two boys who wish to exchange money for apples. If one has twelve apples and the other a shilling, the apples will be sold at a penny apiece. Suppose now that the apple-tree pro-

duces twenty-four apples instead of twelve, the labour or human effort of cultivation or production remaining the same, and the apples will be sold at a halfpenny apiece. Or, secondly, let the shilling by increase in the cost or difficulty of procuring the precious metals be reduced to sixpence, and the apples will in this case also be sold at a halfpenny apiece. In both cases there is an equal fall in price. But the real facts of the case, the causes of the fall in price, and all the consequences are utterly different in the two cases, and, without knowing which of the two things has happened, the fall in price tells us little or nothing that is important for our purposes.

DIFFERENCE IN EFFECT ACCORDING AS THE FALL ARISES FROM THE ONE CAUSE OR THE OTHER.

To attempt to point out here what the different consequences are would occupy too long a space. But one point may be mentioned as an illustration. It is obvious that if the two boys have entered into a contract, the one to sell and the other to buy a certain number of apples at the price of a penny apiece for a series of years, the several positions will be utterly different according as a subsequent fall in value of the apples to a halfpenny apiece arises from an increase of apples or from a scarcity of pence. If it has arisen from an abundance of apples, the boy who sells the apples will be better off, but the boy who buys will be none the worse. If it arises from a scarcity of pence, the boy who has undertaken to buy will be a heavy loser.

To assume, then, that because prices have fallen, gold has become scarcer is to assume the most important point at issue. The critics of Mr. Goschen

and Mr. Giffen assert that there are special causes which account for the increased abundance of most of the articles in the Economist list. They say that these articles are, in consequence of the cultivation of new countries, of cheapened and shortened transit, of improvements in manufacture and production, produced in much larger quantities than before without any proportionate increase in the cost of, or human effort employed in, their production, and that this fully accounts for the fall in price.

Some of them say, further, that this production has been carried to excess, and that, pending adjustment, glut, low prices, and distress are the consequence.

VARIOUS CRITICISMS ON MR. GOSCHEN AND MR. GIFFEN.

Several able pamphlets and articles have appeared, criticising Mr. Goschen's and Mr. Giffen's arguments and figures, and suggesting various causes for the fall in prices other than a want of gold: *e.g.* Mr. W. Fowler's Cobden Club pamphlet; a letter from Mr. Marshall, of Leeds, in the Chamber of Commerce *Journal* of November, 1883; an article by M. Leroy Beaulieu in the *Revue des Deux Mondes* of May, 1886; M. Forsell on the *Appreciation of Gold*, 1886 (Effingham Wilson); Professor Laughlin on *Gold and Gold Prices since* 1875 in the *Boston Quarterly Journal of Economics* for April, 1887; Mr. David A. Wells on the Depression of Trade in the *Contemporary* of August, September, and October, 1887. Much evidence on both sides of this question will be found in the evidence given to the Commission, and the difference in opinion evinced by the witnesses is echoed in the diverging Reports of the Commissioners. Two further papers have since appeared, one by Dr. Erwin

Nasse of Bonn[1] on the fall of prices during the last fifteen years. This paper seems to me to be in some respects the most important that has appeared on this part of the subject, since it deals fully and, I think, successfully with the main contention of the supporters of the "scarcity of gold" theory: the contention, namely, that the causes of cheapness alleged by the opponents of that theory were in full operation long before the period when prices began to fall, and that consequently the fall since 1875 must be due to some further cause, and that this cause is to be found in the scarcity of gold. The other paper is by Mr. Giffen, who, after declining to appear as a witness before the Commission, published in the *Journal of the Statistical Society* of December, 1888, an article repeating and supporting his previous opinions and arguments. Upon this article Dr. Nasse makes the following observations:—"Mr. Robert Giffen now denies positively that the circumstances of Production differed in the two periods ending and beginning with 1873. In the article in question (which, compared with his earlier works, exhibits, with an appeal to Stanley Jevons, a return to the purest 'Quantity Theory' so vigorously contested by Tooke) Mr. Giffen argues as follows: 'Goods increased in the same degree before and after 1873; metallic money increased till 1873, but no longer; the price of goods rose till 1873, but from that time fell. Therefore the cause of the latter phenomenon must be looked for, not in forces which continued to operate during the whole period, but in that force in which a change took place in 1873.'

"A very obvious conclusion," says Professor Nasse,

[1] Das Sinken der Warenpreise während der letzen 15 Jahre. Jahrbüchern für National-Ökonomie und Statistik. N. F., Bd. XVII., Jena, Fischer, 1888. It is printed separately as a pamphlet.

"if the money price of goods were determined by nothing but the quantity of goods and the quantity of metallic money, and if it were also proved that in the two periods referred to the increase of both quantities had taken place in the manner thus assumed. We dispute both propositions, and we dispute the former of them in accordance, not only with Tooke, but with many others, and, we may say, in accordance with the opinions now prevailing in Germany." [1]

IMPORTANCE OF A RIGHT CONCLUSION ON THIS QUESTION.

The point raised by the above criticisms, although not the special subject of this paper, is one of very great importance. If prices have fallen by reason of a deficiency in gold, there is no gain to mankind generally, and there is, as shown above, a disturbance in fixed contracts which simply takes from one party and gives to the other. If prices have fallen by reason of the greater abundance of the articles sold, then, unless there has been over-production, mankind generally are better off, and whether there has been over-production or not, there is no such disturbance of fixed contracts. It would therefore be a great mistake to conclude, even assuming the quantity theory to be true, that a fall in prices is evidence of a disturbance of contracts, unless it can be shown that the fall is due to a scarcity of gold. This is a point which deserves the attention of those economists who propose to obtain a more stable measure of value by averaging all prices, and altering the measure of value from time to time, so

[1] Article by Dr. Erwin Nasse on the Final Report of the Gold and Silver Commission. Jahrbüchern f. National-Ökonomie und Statistik: 1889. (Gustav Fischer, Jena); p. 656. It is printed as a separate pamphlet.

as to keep the average of prices the same. If prices of goods fall, not by reason of any change in the measure of value, but by increased abundance of the things sold, what considerations of justice or of convenience are there which call for an alteration in the measure of value? Such an alteration might lead to strange results. Suppose, for instance, that the price of labour remains the same, but that the price of all articles consumed by workmen falls in consequence of improvements in production, the effect of lowering the measure of value in accordance with the average of prices would be to diminish money wages, and at the same time, in addition, by raising prices, to diminish real wages.

BUT IT IS NOT THE SUBJECT OF THIS PAPER

I have adverted to this part of the subject because it is scarcely possible to omit all notice of it in any discussion on the relation between gold and the prices of commodities. What I have said is enough to show how much those have to prove who attribute the recent fall in prices to a deficiency in gold, even if we assume that prices depend on a simple proportion between the quantity of gold currency on the one hand, and the quantity of exchangeable commodities on the other. But it is not my object in this paper to examine the alleged *deficiency of gold* on the one hand or the alleged *abundance of commodities* on the other, and the effects to be attributed to these two causes respectively. The point I wish to discuss is the more abstruse and elementary question, whether there is any such quantitative relation between gold and exchangeable commodities as to entitle us to draw certain conclusions concerning a rise or fall in prices from any increase or

diminution of the quantity of gold on the one hand, or of the quantity of exchangeable commodities on the other: in other words, "What is the connection between Gold and prices?"

II.—WHAT THEN IS THE CONNECTION BETWEEN GOLD AND PRICES?

CHANGED AND CHANGING CONDITIONS OF BUSINESS.

This question must not be dealt with as if it could be answered once for all by a simple, absolute, and conclusive formula. It is an answer which depends upon the different modes and conditions of doing business, and which must vary with those modes and conditions. The proper form of putting the question is therefore: *What, in the present state of business, is the real connection between gold and prices?* Or, to put it in another form: *What is it that we call Money? What is it that we pay with? What creates it? What limits it?*

This is the question of a highly abstruse and difficult character; but it is notwithstanding impossible to form any sound opinion concerning the causes of high or low prices, much more to come to any satisfactory conclusion concerning the proposed remedies for low prices until we have some clear conceptions on this point. It is the more important that we should make this inquiry, because a great deal that is written in the books concerning gold and prices seems to be founded on a state of things which has passed away, and to be, therefore, inapplicable to the present state of trade and business.

GOLD NOT USED IN WHOLESALE TRADE.

Any one who thinks about the subject of gold and prices must be struck by the curious fact that it is in the wholesale dealings in the principal articles of commerce that the fall of prices is shown to have taken place, and that, at the same time, in these dealings little or no gold is ever used; whilst, on the other hand, in the dealings in which gold is used—such as small retail dealings and wages—no such fall in prices, or no equal fall, has been proved. Again, there are probably few persons whose imaginations have not been moved by the magnitude and efficiency of the machinery which we call credit, by means of which the business of the civilised world is carried on, with the aid of no medium of exchange beyond what can be written on a sheet of paper, or despatched by a telegraph wire. These obvious facts suggest the consideration that the relation of quantity between gold and articles sold is only a small part of the question, and that it is impossible to understand the question of price without understanding what is the part which credit plays in the matter.

STOCKS OF GOLD IN DIFFERENT COUNTRIES DO NOT VARY WITH THEIR TRADE.

Similar thoughts are suggested by the consideration of the proportions in which the stocks of gold and silver are distributed among the different nations. If the demand for the precious metals bore any proportion to wealth and trade, we should expect that the wealthiest and most commercial nations would have the most of it. But this is not the case.

The following is Dr. Soetbeer's estimate of the

monetary supply of gold and silver in the countries which have the greatest wealth and the largest share of trade at the end of 1885 :—[1]

Great Britain	2,625 millions of marks.
France, Italy, Belgium, and Switzerland	7,395 „ „
Germany	2,636 „ „
United States	3,756 „ „

These figures bear no proportion to the wealth and trade of the respective countries; and the disproportion would be still greater if, as has often been proposed, £1 notes were substituted for all or for a part of the sovereigns actually passing from hand to hand in small payments in England.

The following is quoted by Dr. Neuman Spallart as an estimate of the supply of gold and of other money in different nations in proportion to population :—[2]

Countries.	Gold per head.	Gold, silver, and uncovered notes per head.
	£ s. d.	£ s. d.
France	4 13 0	9 8 0
Australia	6 7 0	6 15 0
Holland	1 6 0	5 19 0
Belgium	1 17 0	5 14 0
United States	2 5 0	4 10 0
Egypt	3 16 0	4 6 0
United Kingdom... ...	3 0 0	3 19 0
Germany	2 0 0	3 12 0

The United Kingdom comes low in this list, notwithstanding its immense wealth and trade. It would, of course, come much lower if we were to take the proportion between the quantity of gold or money in use in each country, and the wealth or trade of each country.[3]

[1] Soetbeer's *Materialien*, 1886, p. 77.
[2] *Uebersichten der Weltwirtheshaft*, 1877, p. 455.
[3] I have not attempted to bring these or other figures down to date, because my argument does not depend on the figures of any particular year.

If, in addition, we were able to get any trustworthy returns for India and the East, which have for centuries been absorbents of the precious metals, we should no doubt find that the stocks of gold and silver there were out of all proportion greater, when compared with the amount of their wealth and trade, than the stocks in more advanced countries.

NO FIXED PROPORTION BETWEEN GOLD AND TRADE.

There are, therefore, insuperable reasons for disbelieving any direct proportion or relation between the quantity of gold needed as a circulating medium to carry on trade and the quantity of trade ; and we shall be in danger of being misled if we incautiously admit the assumption that any such relation exists.

III.—MR. MACLEOD'S THEORY OF CREDIT AND CURRENCY.

MR. MACLEOD'S MEMORANDUM AND EVIDENCE, AND HIS BOOK ON THE THEORY AND PRACTICE OF BANKING.

On this point it seems that Mr. Macleod's evidence and his writings on the subject of credit furnish us with very valuable suggestions. Not that there is anything new in attaching importance to credit—every modern author does that—but he has described its nature and explained its functions more exactly and completely than any other writer whom I know.

His books contain much learning, elaborate argument, and controversy, which, however interesting to the student, are an embarrassment to busy men. But they contain a valuable discussion of the legal and economical character of credit and of its relations to

currency; an interesting history of the development of modern banking; and an instructive analysis of the present practice of banking, and of the present use of credit.[1]

MR. MACLEOD'S THEORY.

The following is an attempt to state concisely and clearly in common language such of his views and conclusions as bear upon the connection between gold and prices.

DEBT OR CREDIT IS AN EXCHANGEABLE QUANTITY.

Wealth consists of things which have value. The value of a thing is what you can get for it; in other words, value depends on exchangeability. Anything which can be exchanged for other things has value, depending on the quantity of other things it will exchange for.

A debt or credit (for they are the same thing viewed from opposite sides)—in other words, an obligation to pay money or a right to receive money—is an exchangeable quantity and has value, and it is property.

This exchangeable quantity or property is an actual addition to the quantity of exchangeable things previously existing. It can be transferred, as noticed below, and exchanged for other things. It is not accurately represented as a plus quantity on the one side and a minus quantity on the other, which annihilate one another and leave things as they were.

[1] Mr. Macleod has just published the first volume of a new work entitled *The Theory of Credit* (Longmans, 1889). It is, in effect, a full, learned and interesting exposition of views which he has already published, and which I have referred to in the text.

The creation of a debt or credit leaves one party, viz. the debtor, in the possession of money or credit previously belonging to the other party, which he can use and transfer. It leaves the other party, viz. the creditor, in possession of a right which, so long as it lasts, he can also sell and transfer. The extent to which these rights are transferred and exchanged will differ in different cases, but to whatever extent they are used for the purpose of exchange, they are additions to the circulating medium.

IT IS A PERSONAL RIGHT OF ACTION, NOT A LOAN OR PLEDGE OR DOCUMENT OF TITLE.

Mr. Macleod then points out that debt or credit, being a personal right of action for a certain sum of money, is to be distinguished from a loan of a specific thing which is to be returned *in statu quo*, and from a trust or deposit, or pledge of some thing or sum of money which is to be used for a specific purpose; and that it is also to be distinguished from documents which are only titles to specific property, such as bills of lading or dock warrants. These last create no right of action for a sum of money; they represent certain specific goods.

In the case of an ordinary debt or credit, such as that of a banker to his customer, or of the acceptor to the discounter of a bill, the money paid or the credit transferred by the customer to the banker, or by the discounter to the acceptor, is actually sold to the banker in the one case, and to the holder of the bill in the other, to be used by him as he pleases; and the customer or discounter has bought with it a right of action against the banker or acceptor, which he can either keep and put in force, or sell to a third party.

IT IS TRANSFERABLE AT LAW.

The rights of action thus created are transferable at law. In this country, after much controversy in the Courts of Law and some legislation, it appears to be settled that a right of action for a sum of money conveyed by a promise to pay, whether in the form of a bill of exchange or promissory note, or bank credit, or cheque or other instrument, can be transferred to a third party by the person to whom the promise is made, and that such third party can sue the promiser in his own name. In other words, a debt or credit is a thing transferable at law.

Different forms of debt or credit have different degrees of transferability, both at law and in practice.

MONEY IS A FORM OF DEBT OR CREDIT.

The most completely transferable thing is money. It is in effect an acknowledgment of a debt from the community to the holder of the money, which he has acquired by previous sales or services, and which he can exchange at all times and places, against all kinds of goods and services. It is also the one thing by payment of which all other debts can be discharged— n other words "legal tender."

IT PASSES BY DELIVERY AND IS THEREFORE CURRENT.

The ownership passes by delivery, and no one to whom money is delivered needs to inquire whether the person delivering it to him had a good title to it or not. It is this last quality which constitutes it *par excellence* "currency" or "circulating medium."

SO DO OTHER FORMS OF DEBT OR CREDIT.

But there are other forms of "transferable debt" which have also this quality, *e.g.*, bank-notes, bills of exchange, promissory notes and cheques, postage stamps and postal orders, and they consequently operate as "circulating medium" or "currency." They pass from hand to hand as "media" by which sales and transfers are effected.

BANK CREDITS, ETC., THOUGH NOT CAPABLE OF DELIVERY, ARE TRANSFERABLE AND CURRENT.

There are other forms of "transferable debt" or "credit" by which exchanges are effected, but which are not capable of transfer by delivery, not being recorded on separate pieces of paper or other instruments. Such are the enormous mass of bank deposits, book debts, and verbal debts. But though not capable of delivery from hand to hand, like notes or bills, they are exchangeable quantities, and are used to an enormous and ever-increasing extent in effecting sales and exchanges.

ALL PURCHASES INVOLVE THE TRANSFER OF A DEBT OR CREDIT.

All purchases and sales of goods or services are made either for credit (or debt, which is the same thing) or for money. In the cases where they are made for money, it may be either for bank-notes or for gold. If for bank-notes, the notes are themselves a form of credit or debt. If for gold, gold may be looked upon as a credit or debt due to the holder from the community, as an order for goods or services which he can always

exchange anywhere. Every purchase or sale, therefore involves the transfer of a credit or debt. It is the credit or debt so transferred which is circulation or currency, and the demand for circulation or currency, depends on the amount of credit or debt required for effecting sales and purchases. Of the different forms of debt or credit, gold takes care of itself by reason of the difficulty in procuring it, and it is the measure and the basis of all other credit. Other forms of credit are secured by their convertibility into gold; in the case of bills, book debts and banking debts, and other debts, under the fear of insolvency and the effect of the law of debtor and creditor; in the case of bank-notes, if convertible, by precisely similar means, and, in addition, by a variety of precautions differing in different countries. So long as notes are strictly and actually convertible into gold on demand there is no fear of their depreciation either from want of security or from excess,[1] because, being ordinary debts payable on demand, any difference between their nominal and real value will at once be followed by conversion. But, if they are not so convertible, no amount of security can keep them at their nominal value, because, not being debts payable on demand, they may be issued in excess of the quantity of debt or credit needed to carry on current sales and purchases, and, when thus issued in excess of the demand for currency, will necessarily lose their value and become depreciated.

ALL THIS CREDIT IS CIRCULATING MEDIUM, AND AFFECTS PRICES.

All this mass of credit in all its forms is "circulating medium," or "currency," and affects prices just as

[1] Mr. Macleod is a strong opponent of the Act of 1844.

money does.[1] "Hence the creation and use of credit in modern times produces the same effects and acts upon prices in exactly the same way as an equal quantity of gold"; and "it is the excessive creation of credit which produces more changes in the prices of commodities at the present time than any other cause whatever."

I have quoted these last sentences verbatim because, if they are true—of which there appears to me to be no doubt—they show how extremely superficial is the view that prices depend in any direct or simple way on the supply of gold or silver, either in any one country or in the world.

ROUGH ESTIMATES OF AMOUNT OF CREDIT.

Mr. Macleod estimates[2] the quantity of metallic money used in commerce in this country at about 2 per cent. of the whole of the circulating medium. In other words, of the whole number of exchanges effected in commerce, 98 per cent. are effected by credit, and only about 2 per cent. by metallic coin. This must be a very rough estimate, and the proportions must differ greatly at different times and in different places. As regards this point he also states[3] that in 1886 the Scotch banks on a cash reserve of £4,000,000 maintained liabilities to the amount of £90,000,000, or more than 22 to 1; and he quotes a statement that the liabilities in banking credits or deposits of the London banks alone, which

[1] Macleod's *Theory and Practice of Banking* 4th ed., vol. i., pp. 51—54. *See* also vol. ii., chap. xv.

[2] Vol. i., p. 54. App. to "Second Report of Gold and Silver Commission," No. iii., p. 245.

[3] App. to "Second Report of Gold and Silver Commission," No. iii., p. 247.

are just as much issues of credit as bank-notes, amount to £525,000,000. Other estimates are still larger. The total bank deposits of the United Kingdom were estimated by Mr. Palgrave in 1871 at £553,000,000; by Mr. Dun in 1874 at £676,000,000; and by Mr. Dick in 1884 at £760,000,000.[1]

I may further notice, as illustrations of the magnitude of the proportion which other forms of credit bear to bank-notes and cash, that in an interesting paper by C. F. Dunbar in the July number of the *Boston Quarterly Journal of Economics*, 1887, in which the author maintains the position that bank deposits are currency, he estimates (p. 408) the note issue of the United States in 1886 as $240,000,000, and the deposits in the banks as $2,000,000,000, or more than eight times the amount.

Mr. Macleod distinguishes between commercial credit, consisting of bills, and banking credit, consisting of notes and deposits, but he gives no figures concerning commercial bills. It seems probable that bills are diminishing in consequence of the shorter time for which cargoes are on the way, and of payments by telegraph. If so, it is a good illustration of the way in which credit as a circulating medium adapts itself to demand.

FURTHER ARGUMENTS THAT BILLS, ETC., ARE CURRENCY AS MUCH AS BANK-NOTES.

The above epitome is taken from Mr. Macleod's first volume of his *Theory and Practice of Banking*. In chapters xiv., xv., and xvi. of his second volume he returns to this subject. Without indorsing all his views, arguments, or criticisms, I think no reasonable

[1] See *Journal of the Institute of Bankers* of June, 1884, p. 339.

person can doubt that he is conclusively right in arguing, contrary to the opinion of Lord Overstone and others, that the larger number, if not all, of these forms of debt or credit are, to all intents and purposes, "currency."[1] He proves, at all events, that these forms of debt or credit operate in precisely the same way as gold and bank-notes as media for effecting sales and exchanges, and for closing business transactions, and that they must, therefore, so far as a demand for "circulating medium" is concerned, have a similar effect on prices. Each particular instrument or form of credit may have a smaller degree of exchangeability, and consequently be a less efficient form of currency than the same sum in the form of sovereigns or of a note. But the amount of these forms of "currency" is incomparably larger than the amount of gold or notes, and the number of exchanges effected by their means is also out of all proportion greater.

ACT OF 1844.

It is probably to the ignoring of this fact that the partial failure of the Act of 1844 is due. That Act is claimed as a success on other grounds, but in one respect it certainly failed to fulfil the expectations of its promoters. They thought that a limitation of the particular form of credit known as bank-notes would automatically restrict the currency of the country, lower prices, correct the foreign exchanges, and keep gold in the country.

On the first occasion on which it was tested—in 1847—it did none of these things; and it was only after that time that the bank directors and the

[1] See secs. 14—18 of chap. xv., pp. 324—333 of vol. ii.

commercial community became satisfied that the true way of effecting these objects was to raise the rate of discount or interest. The statutory restriction on the notes operated only on the notes in the reserves of the bank. But raising the rate of discount restricts debts and credits generally; it raises the value of money or currency in all its forms, including gold; it makes borrowing more difficult and expensive for traders. It thus diminishes the circulating medium, attracts gold, and, by increasing the cost of production and forcing sales, tends to lower prices. This is a point on which Mr. Macleod lays great stress—and, as it seems to me, with justice—as confirming his theory that tranferable debt or credit is one and the largest form of currency, or circulating medium.[1]

MR. MACLEOD A STRONG BULLIONIST.

It is needless to say that Mr. Macleod is a strong bullionist:[2] that he regards the convertibility of the

[1] It would be gratuitous cruelty to attempt to inflict on my readers a revival of the controversies over the Act of 1844; controversies which have slumbered, rather from the exhaustion of the combatants than from the acknowledged defeat of either party. But should those controversies be re-awakened, may not a possible solution be found in the views advocated by Mr. Macleod? May it not be conceded to the advocates of the Act that convertible bank-notes can, like other forms of credit, be created in excess of real requirements, and that, when so created, they may, like other forms of credit, react on trade and on prices? And may it not also be conceded that their unsoundness, *i.e.*, their non-convertibility, is attended with peculiar inconvenience and injustice to holders who are unable to protect themselves?

May it not be admitted, on the other hand, that the opponents of the Act have proved that convertible bank-notes do not differ in principle from bank deposits and cheques; that both are forms of credit; that both alike are created, exist, and are extinguished according to the demand for them; and that other forms of credit are acted on by trade and prices, and react on trade and prices, in the same manner, if not in the same degree, as bank-notes?

[2] *Theory and Practice of Banking*, vol. ii., p. 275.

bank-note as a *sine qua non*; and that he also regards caution in lending with a careful regard to the rate of interest, solvency in debtors, and punctual discharge of debts, as the essentials of a sound currency as well as of sound trade.

HIS DEFINITION OF CURRENCY.

Mr. Macleod sums up his account of the matter by saying that "currency" is the "*representative of transferable debt*"; so that "*whatever represents transferable debt is currency.*"[1]

IV.—REMARKS ON MR. MACLEOD'S THEORY.

QUESTION CONCERNING THIS THEORY: WHETHER IT DOES NOT CREATE SOMETHING OUT OF NOTHING.

The first and most obvious question which arises upon this definition, and indeed upon his whole argument, is "whether in attributing to debt and credit substantial existence as exchangeable quantities, and as a circulating medium, we are not creating something out of nothing? How can a loan of £100 from A to B produce more than £100? Must not what is added on one side be subtracted on the other? Must not A lose by the loan what B gains?

ANSWER TO THIS QUESTION.

The answer to this is as follows:—

Something is not, in fact, created out of nothing by the creation of a debt or credit; but a right to some-

[1] *Theory and Practice of Banking*, vol. ii., p. 333.

thing, which may be absent, or distant, or future, or even contingent, is converted thereby into a present medium of exchange.

The debt or credit is either the consideration for goods already sold, or services already rendered, or it is an anticipation of the proceeds of future sales or future services. If I receive bank-notes or gold or a cheque for goods which I sell, or for services which I have rendered, and pay it into my banker's, the credit he gives me, or the debt he owes me, represents the return I get for what I have already sold or done. It is that return turned into a convertible shape, into a promise of the banker's to pay and a right on my part to receive: in legal phraseology, into a right of action against the banker.

So with respect to credit or debt in respect of future or distant goods or services. What it does, if the credit is sound, is to anticipate the future: to make the distant present; and to give what already exists in a potential and inconvertible form the quality of immediate exchangeability and convertibility.

When a Scotch banker gives a young man credit, what he does is to give him cash and capital for commencing business in return for a promise to pay, which the banker trusts because he has confidence in the future returns to be realised by the young man's capacity, industry, and character; and these are thus, as it were, discounted, and turned into something which their owner can put to present use. The Scotch Bank probably gives this in the form of its own notes, and these remain in circulation until they return to the bank in discharge of the debt.

When a merchant who is exporting or importing goods, or when a manufacturer who is selling to a dealer, gets a banker to discount his bill, the goods

are in existence; the market also exists; and the expectation of a sale at a profit may be assumed to be a reasonable expectation. But none of these things are immediately convertible into cash or useable capital until the discount of the bill gives the merchant the power of drawing cheques on his banker. He thereupon has the money or the immediate power of getting it, and the banker has the bill, which he can keep until it is paid, or, in case of necessity, can sell or exchange. The cheques, on the one hand, and the bill, if it is sold or re-discounted, on the other, become additions to the circulating medium, until the credit is exhausted and the bill is paid.

In neither of these cases, it is true, has the creditor any specific lien. He has only a personal right of action; but the value of that right and the soundness of the credit depend on the truth of the debtor's anticipations of future realisation and profit.

The answer to the question, whether credit, according to Mr. Macleod's theory, creates something out of nothing, is not complete without a further observation. The creation of a credit, or a debt, or a right of action, is of course not the creation of a sensible or visible object of human desire. It is not the creation of "Food, Clothes, or Fire." But it is a means by which the creation of sensible objects of desire is immensely facilitated and extended. Just as speech, or writing, or arithmetic, or the telegraph, or good laws and government, facilitate and extend the creation, transfer, and consumption of the physical objects which men use and enjoy, so does a system of credit, in a very eminent degree, facilitate and extend these processes. Men cannot feed or clothe or warm themselves with promises to pay or rights of action any more than they can do so with gold

sovereigns ; but without rights of action and promises to pay they would be infinitely less able to feed or clothe or warm themselves than they now are.

CONSEQUENT DEFINITION OF CREDIT AND ITS LIMITATION.

Mr. Macleod defines credit to be a "right of action against a person to pay or do something."

To this it might be added that the value of the right depends *on a reasonable confidence that the person in question will be able to pay or to do that something.* This consideration gives the proper limit of sound credit, and shows the danger of unsound credit.

Under these circumstances it deserves consideration whether any theory or definition which represents currency as transferable debt ought not to be in some way limited, so as to show that in order to be sound currency the transferable debt must be ultimately based on some goods or services which are actually or potentially in existence, and which, though not immediately realisable or exchangeable, will, according to all sound expectations, in due time become realisable and convertible. Viewed in this light the credit given for the expectation of future profit is analogous to the price of land, which is the present value of future expected returns. Consequently, whilst not denying the substantial truth of Mr. Macleod's definition, I doubt if it expresses thoroughly and completely the whole state of the case without some such further qualification as above suggested.

THE SYSTEM OF EXCHANGE BY CREDIT IS ONE OF BARTER, BUT WITH PERSONAL RIGHTS AND DUTIES INTERPOSED AS THE MEDIA OF EXCHANGE.

The words "Debt and Credit" are apt to convey the impression of an uncertain draft upon an unknown future; and this impression is intensified by the form in which they exist—viz., that of obligations to pay in gold, which it is quite certain will not and cannot be realised. Thus the system acquires in the eyes of many persons a precarious and dangerous characte which, when analysed, it does not really deserve. The present system of trade is often looked on as a sort of inverted pyramid; as an immense fabric of promises, more or less trustworthy, resting on a narrow and precarious base of gold, and ready on a very slight push to topple over and crush those who trust in it. This feeling of mistrust may appear to be aggravated by a theory which states that the currency or circulating medium in which we are all dealing every day is not bullion, or even the credit of the nation, but the promises to pay of all the persons engaged in business. But any such mistrust is met by the additional explanation given above, that these obligations are not mere verbal promises to pay given without any solid foundation of fact, but are promises to pay founded on the fact that the person promising has already something in the shape of the return for goods already sold, or services already rendered; or in the shape of a distant cargo; or of profitable land; or of a factory; or of a share in a freight-earning railway; or, it may be, in the shape of personal character, industry, and ability; something in the nature of goods or services, distant or future, it may

be, which are by this system of credit turned into a form which is capable of immediate use as currency or circulating medium. These promises, though legally personal liabilities, and essentially based on personal confidence, are not mere words or letters; they are conversions of the distant and the future into the present, just as the present price of an estate is the conversion into a present sum of its future returns. The currency thus created becomes an order for other goods or services, and thus goods or services, past, distant, or future, are realised and exchanged against other goods and services. The system is in effect one of barter, but barter of a very refined description. In the original and simplest form of barter, goods or services were exchanged directly against one another; a horse against so many sheep; a day's labour against a day's food; and so on. In the next stage the exchange was effected by the intervention and actual use of metallic money, which was then both the measure of value and the actual medium by the use of which the exchange was effected. In the third stage, to which the most advanced nations have now come, the barter is effected, not by the use and intervention of money, but by the use and intervention of personal promises, which are made in terms of money, and the value of which is therefore measured by money. Cargoes in China are exchanged against cargoes in England, and the bills of exchange which pay for them both do but disguise the fact that trade is exchange of goods and services for one another. By these bills and other instruments of credit, the actual use of money, which was formerly the medium of exchange, is dispensed with, and we are returning in the advanced state of commerce to a state of barter in which money is merely the measure and language, not

the actual medium, of exchange, and in which personal rights and duties take the place of cash.

THESE OBLIGATIONS TO PAY MONEY ARE NOT PERFORMED IN SPECIE, BUT ARE CLEARED: *i.e.*, "SET OFF" AGAINST ONE ANOTHER.

The currency thus created takes the form of promises to pay in gold. But these promises are seldom, if ever, specifically performed. They are set off against one another, through the operation of banks and clearing-houses; credit or debt is thus created, circulates, and returns into itself to be extinguished; and the whole transactions are commenced, carried on, and closed without the intervention of a sovereign or a bank-note. Some figures suggestive of the extent to which this species of circulation has been carried are given above and below.[1] No complete statistics of clearing exist; but it may be stated with confidence that this form of closing transactions is the rule in modern business, and that payment in specie is the very small exception.

CREDIT REDUCED BY RAILWAY, STEAMSHIP, AND TELEGRAPH.

It is commonly stated that one effect of the steamship, the railway, and the telegraph has been to reduce the period and restrict the amount of credit, or, as it is said, to diminish the supply of bills; in other words, to substitute cheques and telegraphic transfers, which operate at once, for bills at three or six months. If so, it is a good illustration of the views above advanced. If credit consists in turning the distant and

[1] See pp. 75 and 107.

the future into the present, we should expect, when distances and time are physically annihilated or reduced by the telegraph or steam, that the credit which has hitherto been used to obviate the difficulties of distance and time would no longer be needed; and this is precisely what has happened. Existing capital has lost an investment; a certain quantity of credit has ceased to exist; no interest is needed to pay for it, and the price of goods is reduced, not only by the reduction in the cost of transport, but by the interest on capital heretofore used in paying for them.

DEBT IS CURRENCY ONLY TO THE EXTENT TO WHICH IT IS TRANSFERRED.

A further observation on Mr. Macleod's definition of "*currency*" as "*transferable debt*" is that it needs the addition of the words "*to the extent to which it is actually transferred.*" If a security for money is kept in a drawer till it is presented for payment, it does not during that period operate as currency, any more than a sovereign or a bank-note does. But the difference is that a security is very often kept in a drawer, whilst a sovereign or bank-note is seldom kept at all, but is received only for the purpose of being paid away again. The distinction is important, because the efficiency of an instrument of currency does not depend on its amount, but on its amount multiplied into the number of times it is used. A sovereign used twenty times does as much work as twenty sovereigns or as a £20 bill used once. When, therefore, "transferable debt" is spoken of as currency, we must take care to distinguish between the efficiency of its different forms.

Again, many forms of credit are confined to the

special business for which they were created, and do enter into general circulation. They are media of exchange in that business, but not in other businesses.

Again, all forms of credit return into themselves and are extinguished. They are not, like gold and silver, permanent additions to the circulation, but are created, extinguished, and recreated, according to demand. During the time of their existence they are additions to the circulating medium and do the same work as money. But they do not form accumulated stocks, and their quantity varies in the manner I have attempted to describe below.[1]

We must remember that the more frequently an instrument of currency passes from hand to hand, and the more it is used by the poor and the ignorant, the more important it is that its soundness, its value, and its negotiability should be perfect, absolute, and universally recognised. It is this consideration, rather than any real difference of function, which distinguishes gold and silver money from all other instruments of exchange. It is this consideration which justifies the special conditions to which the Act of 1844 subjects the issue of bank-notes, if those conditions are to be justified at all.

DOES THE ABOVE VIEW CONFUSE CURRENCY WITH CAPITAL ?

It may be said that in the above views the distinction between currency and capital is not maintained. The charge is true, but how far is it material? We are apt to use such words as "money," "currency," "floating capital," "fixed capital," until we forget that the things they represent have not as sharp an outline, and are not as clearly distinguished from one another, as the

[1] See p. 104 and following.

words themselves. If we look to things, and not to words merely, we shall find a series of circulating media which, though they differ much among themselves, so that there is a wide interval between the first and the last, yet have certain qualities in common and run into one another. Thus we have gold coin, inconvertible bank-notes, convertible bank-notes, deposits, money at call, money on notice, bills at three months, bills at six months, exchequer bills, debentures payable at short periods, public loans, &c., payable at longer periods, debenture stocks, irredeemable annuities, and shares. All of these, with the doubtful exception of gold coin, are some form of debt or credit. All can be used and are used as circulating media, some easily and frequently, others with greater difficulty and very rarely. Gold coin carries in itself the quality which makes it exchangeable. Inconvertible bank-notes are forms of credit, resting on the imperfect authority of law, and deprived of the quality of convertibility into gold which gives value to other forms of security; they are unnatural monsters, only to be tolerated in cases of extreme necessity. Convertible bank-notes are forms of credit to which, in this country at any rate, habit and experience and, latterly, special legislation have given qualities of exchangeability equal, or all but equal, to that of coin. Deposits and money at call, if in solvent hands, are exchangeable with equal certainty and equal speed, and with much greater convenience and safety. Money at notice and bills of exchange differ in being available at somewhat longer periods. Debentures and redeemable stocks have still longer times to run; whilst irredeemable annuities and shares are only realisable by sale in the market. It is the trader's, and especially the banker's, business to distinguish between all these

different forms of debt or credit, and to determine which of them he can safely hold consistently with the ready discharge of his own liabilities. Some of them, such as stocks or shares, are so far from being immediately realisable that their purchase and sale constitute demands on the forms of money or capital more immediately available. But bank deposits, and the cheques by which deposits are operated upon, are as immediately available as coin itself, and are much cheaper and more convenient. They have, as we have seen, as great an effect on prices. It is instructive to see that commercial men, in speaking of payment by cheques as distinguished from bills, speak of payment by cheques as payment in "cash," though in truth both are forms of credit. For our purposes, therefore, bank deposits and cheques have as much to be termed "currency," or "circulating medium" as bank-notes; and if we prefer to distinguish them by calling them "floating capital," we must remember that, for purposes of exchange and of regulating prices, this form of "floating capital" has all the functions and qualities which belong to bank-notes and coin.

V.—IMPORTANCE OF MR. MACLEOD'S VIEWS AND THEIR CONSEQUENCES.

IMPORTANCE OF MR. MACLEOD'S VIEWS IN SHOWING HOW CREDIT HAS TAKEN THE PLACE OF GOLD.

It is not, however, necessary for us to give a distinct meaning to "wealth," or to have a complete theory of value or an accurate definition of currency. Whether "wealth" includes "rights" as well as visible or sensible objects; and whether the statement that "*the value of a thing is what can be got for it*" is an expression

of the ultimate result of analysis; or whether we can carry analysis farther, and trace the two sides of the equation to the quantity of human effort necessary to procure them, are questions which may be important for some purposes, but not for ours.[1] Whether all "transferable debt" is "currency," or whether there can be any "currency" which is not or does not represent "transferable debt," is also a question which we may leave on one side.

Nor is it important for us to determine whether in Mr. Macleod's theory too much importance is attached to legal obligations, or to speculate on the difficult question how far commercial law derives its sanction and its power from following the habits of business men, and how far it governs and creates those habits.

For our purpose the important fact to which Mr. Macleod has called attention is, that in almost all wholesale dealings and in a large number of retail dealings, the consideration paid for goods or services is now, not gold or bank-notes, but promises to pay gold; that these promises when sound, as they generally are, have the same value and do exactly the same work as gold; and, in fact, to all intents and purposes replace gold.

[1] Mr. Macleod seems to be absolutely right when he says that the economical value of any existing thing is simply what can be got for it: or, in other words, that its value depends upon the demand for it, and not upon the cost or amount of human effort which has been spent in acquiring or creating it. On the other hand, it is surely also true, that where anything can be produced *ad libitum* by human effort, the amount of human effort necessary to produce it becomes the outside limit of what men will give for it; and, if demand is tolerably steady, tends to become approximately the measure as well as the limit of its ordinary value: and it is also true that *sound* promises to pay, like other articles of value, are not created without an expenditure of human effort. Unsound accommodation bills, whatever their legal character, do not make good trade.

From these facts many important consequences result, among which are the following :—

I. CREDIT IS NOT MERELY AN ECONOMY OF GOLD—IT TAKES ITS PLACE AS A CIRCULATING MEDIUM.

The ordinary language in which it is said that "credit" is an "economy of gold" is, even if accurate, very inadequate. "Credit" is not simply a means of using less gold. "Credit" or "Debt" is a substitute for gold as a circulating medium, which has in some places almost displaced its principal, and which may displace it entirely, or almost entirely, as nations advance in commercial aptitude. Its functions are so great and so important that modern commerce would without it not only have been more difficult, but could not possibly have been carried on. If it is an economy, it is an economy only in the sense in which the railway or the steamship can be considered economies. It makes exchanges possible just as the railway and the steamship make the transportation of goods possible. It is as great, if not as visible, an instrument in erecting the gigantic fabric of modern trade as steam or electricity.

2. IT IS A SUBSTITUTE OF MUCH GREATER POWER AND EXPANSIBILITY.

It is a substitute, not only of infinitely greater power than the instrument which it replaces, but of infinitely greater expansibility. There is no limit to its expansion except demand.

If it is true that exchange by means of credit is barter, the demand must bring with it its own supply. If goods or services, actual or potential, are to be exchanged one with another, each will necessarily have its own

representative credit; and whenever there is a demand for circulating medium, then there must be an equivalent supply. There are, no doubt, still provinces which credit has not invaded, and in which gold still reigns with undisputed sway; and there may be undue contractions as well as expansions of credit. But if, and so far as, exchange is carried on by credit, the apprehension of any permanent want or diminution of circulating medium, or of a fall of prices consequent on it, is a chimera.

3. THE NOTION THAT GOLD SHOULD INCREASE WITH INCREASE OF TRADE AND POPULATION IS A FALLACY.

These views of credit dispose of a great number of arguments in support of the alleged deficiency of gold, founded on a comparison of the supply of gold with the increase of population, of trade, and of wealth. People have found something which suits them better than gold. To argue that the circulating medium is deficient because gold has not increased in proportion to wealth and population, is as unreasonable as to argue that there is a great deficiency of means of locomotion because turnpike roads and stage coaches have not increased in proportion to the number of persons who travel.

4. SOME DOCTRINES CONCERNING THE TRANSFER OF GOLD AND SILVER IN INTERNATIONAL TRADE MAY BE DOUBTED.

They also suggest sceptical doubts concerning a great deal of very difficult and abstruse doctrine on the subject of international trade and the effect of the transfer of the precious metals from country to country on prices.

These theories are at best of very difficult and doubtful application. When gold and silver are remitted with the greatest ease from country to country; when banking systems and banking credits extend over the trading world; when the transfer of credit in the form of securities settles a large proportion of international balances; when one country uses far more gold or silver in proportion to its business and exchanges than another; when some countries have forced paper currencies; when one nation locks up bullion in its treasury because it has surplus revenue and no bank, and another because it wishes to keep a reserve for military purposes; when the chief demand of some countries for bullion is for the purpose of hoarding or for ornament; and when we are quite uncertain what are the comparative demands of each country for all the different purposes for which bullion is required;—it is very difficult in any given case to trace any exact connection between the flow of bullion and prices, or to find out in what degree the one depends on the other.

If gold were actually used in all purchases and sales in England and in America, it is easy to see why the transfer of gold from England to America should at once and directly lower prices in England, and raise all prices in America. But if gold is not actually used in purchases and sales in either country—if, instead of being the medium of exchange, it is only the measure of value—it is very difficult to see, so long as it is in commerce at all, how the *locus in quo* of gold at any particular moment can have any direct effect on prices in any particular place, or at any one place more than another. A yard measure is a yard measure in Liverpool or in New York, although the standard yard may be kept in London. At any rate, the effect of

the transport of gold on prices will not be of a simple and direct kind. Some effect it may have on prices through the bank reserves, the rate of discount, and the consequent contraction or expansion of credit; but this effect will be comparatively remote and intricate. Further observations on this point will be found below.[1]

5. CREDIT USED TO SETTLE INTERNATIONAL BALANCES.

Gold and silver have usually been considered to be the only circulating medium by which international balances can be settled, since these are the only media formerly accepted in common by all countries.[2] But this is ceasing to be the case, and different forms of debt or credit are being largely used for this purpose. The transfer of stocks and securities, which are a species of credit, is a large and growing branch of international business; and English banking credits —*i.e.*, debts to English banks—are also, as we have been told by a very competent witness, largely held abroad, whilst the converse is probably the case also.[3]

6. LEGAL TENDER NOT SO IMPORTANT AS SUPPOSED.

It also follows, from the above views of debt and credit, that the position attributed to gold by reason of its being what is called "legal tender" is by no means so peculiar or important as it has been supposed to be.

"Legal tender" is the form of circulating medium

[1] See pp. 121 and 140.

[2] On this point see the correspondence with Dr. Erwin Nasse below, p. 152, and following.

[3] Mr. Raphael's evidence, qu. 7038: "The amount of English money, financial money, banker's money, in the United States is something enormous. . . . This is banker's money which could be called in within sixty days, and which would be quite enough to check any power of America to take gold."

usually gold or bank-notes, in which, by law, debtors can compel creditors to accept a discharge and settlement of their liabilities. Now in all cases of set-off of debts or credit (and such cases comprise a vast majority of all commercial transactions), gold or notes are unnecessary, even for a legal discharge, and the debtor can procure a legal release from his debt by a transfer of credit. In most other cases debtors do, as a matter of fact, discharge their debts by a transfer of credit, and no one dreams of either paying or demanding gold. When this is the case, it is idle to treat currency or means of payment as dependent on the law of legal tender.

7. POSSIBLE REASON WHY SILVER PRICES DO NOT ALTER.

It is possible also that in these views of credit as a circulating medium one reason may be found why Indian and other silver prices remain steady,[1] while gold prices rise and fall. The countries which are well banked and which have the most highly developed systems of credit are gold countries. The countries which are backward, and which have a less developed system of credit, and which use a large proportion of metallic money, are silver countries. The circulating medium in gold countries consists partly of gold, but to a much greater amount of credit. The circulating medium in silver countries, or at any rate in India, is principally silver. The elastic credit circulation of gold countries is subject, therefore, to much more expansion and contraction, to more and more rapid fluctuations, than the circulation in silver countries. The slowness with

[1] It seems now to be at least doubtful whether they do remain steady. See paper by Mr. Atkinson, *Journal of Statistical Society*, March, 1897.

which a rise or fall in silver prices extends through India is a matter of frequent observation, whilst any considerable change of price in articles of general consumption is felt with great and ever-increasing rapidity throughout the Western world.

8. IF CREDIT IS THE CHIEF CIRCULATING MEDIUM, WILL THE REHABILITATION OF SILVER RAISE PRICES?

The following is another important consideration bearing on our inquiry. It is believed by many that to rehabilitate silver will at once raise gold prices, which, as they suppose, have fallen by reason of the discredit or demonetisation of silver. We hear expressions such as that "silver is to be brought to the aid of gold," and so forth, as if to make silver legal tender at a fixed ratio would be adding so much to the circulation. But if prices depend, not on the stock or quantity of gold, but on credit as well, and if credit as a circulating medium is many times larger and does many times as much work as gold, then, so far as the quantity of the circulating medium is concerned, it is to the effect of the rehabilitation of silver on credit, and not to the mere quantity of silver, that we must look for its effect upon price. What effect the rehabilitation of silver would have in increasing credit, and with credit, prices, in gold countries is a question which it would take a very shrewd guess to answer. Would it, if the fall in silver is due to a scare, cure the scare, increase silver values, and cause credit to expand? Would its effect be limited to a diminution of the value of gold considered as a measure of value, and an increase of the value of silver considered as a measure of value? It would no doubt have the effect of taking something from owners of gold and giving something to owners

of silver, of diminishing gold debts and increasing silver debts. Would it have any other and further effect, and, if any, what effect on Credit or on Prices?

9. IT IS NOT TO GOLD BUT TO CREDIT WE MUST LOOK AS THE IMMEDIATE REGULATOR OF PRICES.

Lastly, if credit is the principal circulating medium, it follows—and this is the vital point for us—that, so far as prices depend on the circulating medium, it is to credit and not to gold that we must look as the great, or at any rate the immediate, regulator of prices.

In order to prevent misapprehension, let me again call attention to what has been said above, page 60, viz., that alterations in price may be due either to alterations in the quantity of the articles sold or to alterations in the quantity of the circulating medium. If corn is sold in exchange for gold, and the gold price falls, the fall may be due either to a greater abundance of corn or to a greater scarcity of gold. It is with the second only of these two causes that we are now dealing, viz., with a change of price arising, or supposed to arise, from an alteration in the quantity of the circulating medium. With alterations in price arising from alterations in the supply of the goods sold we have here nothing to do. My position is that, if prices have fallen or risen in consequence of a change in the circulating medium, it is to changes in credit, rather than in gold, that we must look as the proximate cause of the rise or fall.

As has been said before, in the vast majority of wholesale transactions, and in a great and ever increasing number of retail transactions, gold is no longer the medium of exchange, for no gold is used. Gold is, in such transactions, not an article of

exchange, delivered by the purchaser to the seller in return for the article purchased; it is only a measure of the purchasing power conveyed by the purchaser to the seller. Analogies are often misleading, but it is no exaggeration to say that, in most cases, so far as any demand upon, or use of, gold is concerned, it plays the simple part of a foot-rule or of a pound-weight. The seller of 100 quarters of wheat at £2 a quarter delivers the wheat to the buyer, and receives in return, not 200 gold sovereigns, but an order for £200. The purchaser of the wheat sells 40 tons of steel to the seller of the wheat at £5 a ton, and delivers to him in the same way, not 200 gold sovereigns, but an order for £200. The two orders are set off against each other, and the transaction is complete without the use of a single gold sovereign. In this transaction, which is a fair type of ordinary trade, gold plays no part except that of a common measure between wheat and steel. Any additional number of quarters of wheat and any additional number of tons of steel might be thus exchanged either once or any number of times without any fresh demand upon the world's stock of gold. *Assuming that the supply or stock of gold remains the same*, then, so far as exchanges are effected by means of credit as a circulating medium, the amount and number of exchanges may be increased indefinitely, without any need for additional gold, and without any additional pressure on existing stocks. The chief demand for gold is, or is assumed to be, a demand for it as a circulating medium. If and so far as credit takes its place, this demand ceases.

It will be observed that in the above argument it is assumed that the stock of gold remains the same, whilst the demands for circulating media increase. If the stock of gold were to diminish whilst the demand

for circulating media remained the same, the effect would no doubt be to lower prices, unless the decrease of gold were made up for by the ~~the~~ extension of credit. As a matter of fact, the stock of gold has in late years increased and is increasing, though not in the same proportion as the demand for circulating media; and one important question for us, as we shall see below, is whether the recent extension of credit does not amply satisfy or compensate for this increased demand.

But it may be said that, whilst goods and services are usually exchanged against each other through the medium of "credit," there is a balance of goods and services not so exchanged, in which "gold" is still used as the medium. Assuming this to be true, it is obvious that the demand for the "medium" gold depends on the relation of gold, not to all goods and services, but to those goods and services only in the exchange of which it is actually used, and such goods and services are comparatively very few indeed. This relation, it may be added, is itself very far from being simple or merely quantitative. It depends, not on the proportion which the quantity of gold bears to the quantity of goods and services exchanged, but on the proportion which the quantity of gold multiplied into the number of times it is used bears to the number and amount of exchanges of goods and services which have to be effected.

It seems to me that these considerations completely alter the character of the problem with which we have to deal, or, at any rate, so much of it as is concerned with what is termed "appreciation of gold" or "fall of prices." Assuming that a general or universal fall of prices is proved—which, as a matter of fact, is not the case; assuming also that it has been proved

(though as a matter of fact it has not) that their fall is due, not to the increased abundance of the articles themselves, but to a diminution of the circulating medium in which the price is expressed; the important question will be, not whether that part of the circulating medium which consists of gold has diminished in quantity, but whether that much larger part which consists of credit has diminished. To look to the annual supply of gold rather than to the aggregate stock of gold in the world; to prove that for a few years there has been a diminution in the annual supply of gold, and a certain increase in certain demands; to prove further that there has been a fall in the wholesale prices of a large number of articles; to seek the cause of this fall in the deficiency of the circulating medium; to ignore the fact that the actual circulating medium is credit and not gold; to assume that gold is still the general circulating medium, which it has ceased to be; and to conclude that the fall of prices is due to a deficiency of gold;—is certainly a very unsatisfactory and inconclusive argument.

VI.—RELATIONS OF GOLD TO CREDIT.

CASE OF THOSE WHO ATTRIBUTE FALL OF PRICES TO DEFICIENCY OF GOLD NOT PROVED.

If this were all, we might at once unhesitatingly determine that those who attribute the fall of prices to a deficiency in gold have failed to prove their case.

FURTHER INQUIRY NECESSARY AS TO THE RELATIONS BETWEEN GOLD AND CREDIT.

But though this may be true it does not exhaust the case. We have still a very difficult and abstruse inquiry before us.

If credit is the great circulating medium, upon what does credit depend? Is there any settled relation between credit and gold? In what manner does gold, as the measure of value, affect credit? Does credit increase and diminish with an increased or diminished supply of gold? Does the convertibility of credit into gold, which is a *sine qua non* if credit is sound, involve as a consequence that credit varies with gold?

These are very difficult questions, and I find no answers to them in Mr. Macleod's books or evidence. In his *Theory and Practice of Banking*,[1] he says: "A gigantic error is committed by many writers who think that the prices of goods must vary exactly with any increase or decrease of the amount of the currency, whereas there is no necessary relation between the two whatever." He says, further, that the "prices of commodities are *not* determined by the ratio of their quantities to money"; "that whatever truth there may have been in this doctrine in simpler times, it is not true now"; that "actual money plays an insignificant part in modern commerce"; and that the difficulty of tracing the connection between "an increased (or diminished?) quantity of money and prices is one of the most profound and complex problems of economics, which has never been sufficiently investigated."[2]

Under these circumstances I can attempt to do little more than state some of the issues which appear to me to be raised. I doubt if data exist for giving complete answers to them.

[1] Fourth edition, vol. ii., p. 162.
[2] App. to 2nd Report of Gold and Silver Commission, No. iii, p. 236.

GOLD IS STILL THE MEASURE OF VALUE, AND AS SUCH MEASURES CREDIT, ALTHOUGH IT IS NO LONGER IN DEMAND AS THE MEDIUM OF EXCHANGE.

In the first place it is clear that, since all credit is expressed in terms of gold, gold measures credit. Credit or debt is credit or debt of so many gold sovereigns; it is a number of units of purchasing power each of which has the purchasing power of a gold pound. Sir R. Peel's fundamental question, "*What is a pound?*" remains as important as ever. The value of credit still depends on the value of gold, since the value of gold still measures the value of credit; but this is a very different thing from saying that the quantity of credit depends on the quantity of gold.

The £1 has become the measure; it is no longer the medium of exchange, or only to a very limited extent. This, then, is the first distinct relation between gold and credit—as a measure of value gold measures credit.

But the fact that it is no longer in use or demand as the medium of exchange has a very distinct effect on gold regarded as a measure of value. The value of gold, regarded only as a measure, depends on demand and supply. One, and probably the largest, item in the demand for gold is for use as a circulating medium. That demand ceases wherever a substitute is found for it, and such a substitute is found in credit. The consequence is, that to this extent the value or purchasing power of the £1 is *pro tanto* less than it would have been if the demand for it as circulating medium had been maintained; and this diminution affects, of course, the whole fabric of debt or credit in which the £1 is the unit of value. This comparative diminution of value must be of immense importance; and it has

to be taken into account before any conclusions as to the increased value of the £1 can be drawn from any decrease in the supply or from any supposed reduction in the stock of gold.

Of course there are other items of demand for gold, and it is possible that these may have increased to such an extent as to counterbalance any falling off in the demand for it as circulating medium. But when the falling off in supply is so strongly urged, this falling off in the principal demand must not be left out of consideration.

On the question, "What are the demands for gold other than currency demands?" our information is notoriously very defective, and I fear that it cannot be made complete or certain.

GOLD BECOMES A MEASURE OF VALUE BY BEING A MEDIUM OF EXCHANGE, AND, AS PAYMENT OF GOLD MAY BE REQUIRED, SOME GOLD IS NEEDED AS RESERVE.

It is at the same time true that the gold sovereign can only become a measure of value by being a medium of exchange. As value is a relation between two or more things, there can be no such thing as an abstract measure of value. A sovereign if not exchangeable with other things can have no value. It is only because it is exchangeable against all other things that it measures their value. This is, however, a very different thing from saying that it is actually exchanged against all other things. It is actually only used in the exchange of a very few things; and it is its actual, not its potential, use which creates the demand for gold as a circulating medium, and it is this demand which, so far as the circulating medium is concerned, gives gold its value.

Gold is exchangeable because it can be demanded in payment of every debt, and credit is perfectly sound when every debt so demanded is sure to be paid. The effect of this is that all the debts or credits so payable are of the same value as so much gold. This, it should be observed, is a very different thing from saying that either the debts and credits or the gold are of the same value as so much gold would have been if no debts or credits had existed. Gold itself is lowered in value by the use of debt or credit as a supplement or substitute, and debts or credits payable in gold follow the value of gold.

But since gold may be demanded in payment of every debt, and since, though such demands are few, some are sure to be made, it is necessary to keep reserves of gold to answer them. To whatever extent such reserves are needed, there is a use of and a demand for gold which helps to raise or keep up its value. But the use and demand for gold as a reserve is very small indeed compared with the credit or debt based upon it, and grows smaller and smaller with improvements in business. What are the relations of these reserves to credit, and what are the conclusions to be drawn from this relation, I have tried to state below.

HOW AN INCREASE OR DIMINUTION IN THE STOCK OF GOLD AFFECTS THE QUANTITY OF CREDIT.

The next question is, whether credit depends for its amount or quantity on the stock of gold; whether an increase or diminution in the supply of gold, or a diminution or increase in the demand for it, so as to disturb the proportion between the supply of and demand for gold, alters the amount of credit, and, if so, how and to what extent? This is the question

which Mr. Macleod justly pronounces to be abstruse, and I cannot hope to do more than indicate certain lines of inquiry.

TWO DIFFERENT CHANGES IN QUANTITY OF CREDIT.

Credit or debt changes in amount or quantity in two totally different ways.

I. ORGANIC DEVELOPMENT OF CREDIT AND OF CLEARING.

In the first place, there is a growing development of different forms of credit, by means of which it constantly encroaches more and more on the province of gold, and takes to itself a larger and larger share of the duty of a circulating medium. Every new negotiable instrument, every new bank, every new clearing-house, the transfer of securities from country to country —in short, every expedient by which more dealings are effected without the actual use of gold—is in this sense an increase of the quantity of credit, which we may speak of as an "organic development of credit." This form of the growth of credit is not fluctuating; it is constantly and steadily progressing in all commercial nations; it is most highly developed in Anglo-Saxon countries, but it has not reached its full development there; and although it is rapidly progressing in other civilised countries, it has still a great deal to do before it has reached the same degree of development which it has attained in England and America. Its potentiality of extension is, therefore, still very large.

This "organic development of credit" does not increase or diminish with the quantity of gold, or, if it is affected by an increase or diminution in the supply of gold, it is probably affected in an opposite direction.

The more difficult gold is to obtain, the more will people seek for substitutes for gold. The greater the trouble and expense of using gold as a medium, the more will people use credit in its place.

The operation of the organic development of credit is steady, constant, and progressive, and, so far as it is sound, every new growth is, like a mechanical invention, a permanent addition to the productive and industrial power of mankind. Its effect on prices is to promote a rise when they are rising, and to check a fall when they are falling. It probably operates more strongly to check a fall than to promote a rise, since it consists in the adoption of an economical expedient which saves gold and labour, and such expedients are more generally adopted in times of depression and of falling prices than in times of speculation and of rising prices.

It would be an interesting matter of speculation to examine whether in the first half of this century, when the supply of the precious metals was small compared with the supplies of recent years, prices were not prevented from falling much more than they did by the rapid development of banking and other forms of credit.[1]

On this part of the subject we still need exact knowledge. Some facts concerning the increase of banking facilities have been given us in evidence, such as the recent increase of suburban banks, and of postal or post office orders. We have the figures of the clearing-house. We have some statistics such as those collected by Mr. Palgrave, Mr. Dun, and Mr. James Dick.[2] From such facts it would seem that the growth of banking expedients in England is far from being at

[1] See, for the enormously larger quantities of gold and silver produced since 1851, Soetbeer's *Materialen*, 1886, p. 1.

[2] See *Journal of the Institute of Bankers*, June, 1884, p. 339.

an end. The total banking deposits at one moment were estimated at £553,000,000 in 1871, at £676,000,000 in 1874, and at £760,000,000 in 1884, an increase of £84,000,000 in nine years, or at the rate of nearly £10,000,000 a year, and this notwithstanding the recent fall in prices. The amount of credit thus standing at one time in the books of the banks is from thirty to forty times as much as the bank reserve, and probably six or seven times as much as all the gold in the United Kingdom. Nor does the ultimate reserve of gold kept by the Bank of England appear to have increased in proportion to the increase of credit. On the contrary, it is no higher now than it was ten or fifteen years ago.[1] In other countries, such as Germany and France, there has probably been a still faster organic development of credit in recent years, whilst there is much more room for a still further development.

The following figures[2] concerning *bank clearings* illustrate the extent to which this use of credit and economy of gold is carried, and also the room which exists for further expansion.

BUSINESS OF CLEARING-HOUSES.

In the United States :—	
In 1885	$41,321,000,000
,, 1886	$48,925,000,000
In England in 1885 :—	
London	£5,901,000,000
Manchester	£120,000,000
Newcastle	£27,000,000

[1] See Soetbeer's *Materialen*, Part V. It will be remembered that this was written in 1889. Bank Reserves have increased and again decreased since then, but with little or no effect on prices.

[2] Neuman Spallart, *Uebersichten der Weltwirthschaft*, 1887, p. 457.

The whole gold supply of the United Kingdom is estimated by Dr. Soetbeer at £111,000,000, and the average reserve of the Bank of England is not much more than £20,000,000 ; so that the *daily* clearances of the banks amount to nearly as much as one-fifth of the whole supply of gold in the United Kingdom and to nearly as much as the whole of the gold in the bank of England.

In Germany the present clearing system only came into full action in 1884, but in 1886 the business had grown to 12,355,000,000 marks. What relation does this saving of the use of money bear to the quantity of gold Germany is estimated to have absorbed in her new coinage?

In Italy and France similar clearing institutions are just beginning operations.

It is to be remembered that the bank clearings, though the most important of the different forms of set-off, by which the use of money is dispensed with, are only one of those forms. Traders and other persons set off their debts one against the other. Where two persons keep an account at the same bank their respective debts are set off by entries in the books of the bank without appearing in the accounts of the clearing-house ; and this with the increasing size and business of banks, must be a form of set-off constantly on the increase. Then in addition there are other institutions—such as the Cotton Exchange or Clearing at Liverpool, and the Railway Clearing-house in London, all of which effect large and growing exchanges of goods and services without the intervention of money.

In order to ascertain more completely how far the organic development of credit and clearing has gone,

and what room there is for further growth, the following points are suggested for inquiry :—

1. What has been the extension of banking of banks, and of clearings during the last twenty or thirty years? [1]

2. Are bills of exchange diminishing in number and amount, and, if so, does any other form of credit take their place?

3. What has been the effect of the telegraph on the use of currency?

4. What has been the increase of post office and postal orders, and postage stamps?

5. To what extent has the transfer of securities taken the place of gold in international trade?

6. Is more or less gold or silver now used in paying wages than was formerly used?

7. Do the railways, who have large ready-money transactions, use more or less gold than formerly? [2]

8. What other clearing organisations are there, and what is their effect on currency?

It will be difficult enough to get this information for England; but in order to make the information of real value, it ought to be got for other countries as well.

[1] See, for England as regards note issues, Mr. J. B. Martin's paper in the *Journal of the Institute of Bankers* of March, 1880, and as regards deposits and banking statistics generally, Mr. Dick's paper in the same *Journal* of June, 1884.

[2] It does not appear that any great change has taken place in recent years. But from estimates derived from the practice of one great railway, it would appear that the whole business of the railways of the United Kingdom, which amounts to £70,000,000 of yearly receipts and £70,000,000 of yearly outgoings, and which probably involves a greater use of cash than any other large business, is carried on with about 500,000 sovereigns. See App. IV., p. 93, to the Third Report of the Gold and Silver Commission.

2. TEMPORARY FLUCTUATIONS OF CREDIT DEPENDING ON EXPECTATION OF THE DISTANT AND FUTURE. THESE ARE TRADE FLUCTUATIONS, AND THE CURRENCY QUESTION THUS BECOMES A TRADE QUESTION.

The other kind of change in the quantity of debt or credit is the rise and fall which take place in it according as the times are good or bad. So far as credit consists in the conversion into a present economic quantity of future and distant receipts, there is in it a large element of belief, of hope, and of apprehension. This may be well founded or ill founded, but whether well or ill founded, it has a very real effect on the demand for and on the supply of credit. If it is well founded all goes well. Demand and supply satisfy one another. Prices rise or fall, and credit increases or diminishes with them; is created and returns into itself, without disappointment and without disturbance. But human hopes and beliefs seldom turn out in exact correspondence with the facts. When men believe that everything is going to turn out well, that their undertakings are going to produce great results, that there is going to be a great demand for commodities, and that prices are going to rise, speculators and borrowers are ready to pay a large price for present cash, or for the credit of those whose promises are equal to cash; whilst lenders, who are sympathetically affected by the same hopes and beliefs in the distant and the future, are ready to stretch their resources to the utmost in order to gain the large interest which borrowers are ready to give. Hence in sanguine times of rising trade and speculation there is a large increase of debt or credit. This is in effect an increase of the circulating medium, and prices rise too. When

over-sanguine speculations have produced more of anything than men are ready to purchase or consume at the expected prices, or when from any other cause expectations are disappointed—and it seldom happens that some of the expectations of a sanguine time are not disappointed—the mental attitude of men changes ; belief in the future and the distant is no longer what it was ; some borrowers are unable to meet their engagements ; debtors generally are unwilling or unable to pay the large interest demanded ; creditors are cautious and draw in their loans ; debt and credit are contracted ; the circulating medium diminishes, and prices fall.

The character and effect of changes of this kind in the quantity of credit are altogether different from the change which I have termed the organic development of credit.

They are essentially fluctuating in their character, and their effect is not permanent. They are not organic growth, but temporary, and sometimes feverish, changes in the constitution of commerce. The effect of every such change on prices is generally, for the time it lasts, much stronger than that of the organic development of credit, and operates, according to the nature of the change, in opposite directions either to raise or to lower prices. When it operates to lower prices it does so much more powerfully than any organic development of credit can operate in raising them. It is impossible to distinguish this effect on prices from that caused by over-production, which is, indeed, itself one principal effect of the expansion and one principal cause of the contraction of credit.

From the recurrence of these fluctuations at comparatively short intervals in the period prior to 1872, and from the continuance of low prices from that time to 1887 or 1888, it has been argued that the present

depression of prices is not the consequence of one of the ordinary fluctuations in credit of which we are speaking. But this conclusion has been hastily assumed; and one of the points we have to consider is whether the present depression of prices is not still largely due to a reaction from the very unwonted speculations of the times immediately prior to 1872-3.

It is obvious that this view of the effect of the fluctuations of credit on prices opens out questions much wider than those which are ordinarily known as currency questions, and which are generally confined to the supposed effect of bank-notes and gold. If credit depends for its amount on trade fluctuations, if the greater part of the circulating medium consists of credit, and if prices depend on the amount of the circulating medium, then the currency question becomes, as Mr. Bagehot said, a commercial question, and the real remedy for dangerous fluctuation in prices is to be found, not only in placing the relation of gold, silver, and notes on the best possible footing (a thing, no doubt, most desirable in itself), but in a proper limitation of credit, and in a good law of debtor and creditor; insuring, so far as law can insure anything of the kind, that men shall not incur debts without the means of paying them, and that all obligations and promises to pay shall be duly performed.

BUT THESE FLUCTUATIONS MAY STILL BE AFFECTED AT SOME POINTS BY GOLD.

But this does not settle the question we have in hand. Currency in the shape of credit may fluctuate with trade and yet be affected by the stock of gold for the time being and by changes in it, and there are

certainly points at which these temporary fluctuations of credit appear to come in contact with the supply of gold, and to be more or less influenced by it.

CREDIT CONSISTS OF PROMISES TO PAY GOLD.

In the first place it is not to be forgotten that all credit consists in terms of obligations to pay in gold, and that if the discharge of all these obligations were really effected by payment of specie the amount of credit must be exactly limited by the amount of gold. But this never happens, and even the possibility of such a thing is never within the contemplation of practical men. The legal liability is there, but every one knows that it will not be enforced, that it cannot be enforced, and that it is no one's interest to enforce it. No banker dreams that all his customers will ever ask him for all their money at once. If he did, his business would be at an end. Even less do merchants discharge or think of discharging their obligations in cash. Still, in some few instances the legal liability is or may be enforced, and in cases where creditors find it profitable to procure gold for exportation or otherwise, they will insist on payment in gold.

GOLD AND SILVER RESERVES.

In order to meet these cases a certain reserve of gold has to be kept. What the amount of this reserve is, what proportion it actually bears to existing liabilities, and what proportion it ought to bear or will bear, is more than we can predicate. The answer to these questions cannot be given until we know much more of the organic development of credit than we now know.

THEY BEAR NO FIXED PROPORTION TO CREDIT OR DEBT.

It appears, as we have already seen, to vary in different countries, and to be much less in the more advanced countries where credit and debt are more developed than it is in countries where they are less developed. The whole reserve of the Bank of England and of the Scotch and Irish Banks of issue for 1885 is given by Dr. Soetbeer at 565,000,000 marks; that of the Bank of France at 926,000,000 marks, besides a large, if not equal, amount of silver; that of the Italian Bank of Issue and Treasury at about 400,000,000 marks, besides silver; that of the Russian State Bank at 545,000,000 marks, besides a large amount of silver, whilst the metallic reserve of the German banks, gold and silver included, is given at nearly 1,500,000,000 marks.[1] These figures obviously bear no proportion to the wealth or business of the respective countries.

The amount of reserve necessary to support a given amount of credit or liabilities appears to vary also in different businesses and institutions in the same country, and to be a matter to be decided by practical experience or by habit and convention in each case, and not by any fixed general rule or principle.[2] In other words, the proportion of gold or silver in reserve which is necessary to support a given system of credit is varying and uncertain, and all we can say about it is, that it is very small in proportion to the fabric of credit which it supports, and smallest in the most advanced nations. They retain their command of gold, as England now does, but they use

[1] Soetbeer's *Materialen*, p. 70.

[2] See discussion in *Journal of Bankers' Institute*, June, 1885.

less and less of it. So far, therefore, we have no certain relation between the stock of gold and credit.

EFFECT OF A SUDDEN INCREASE IN THE SUPPLY OF GOLD ON CREDIT.

There are certain occasions, however, on which the effect of the supply of gold on credit becomes apparent. Such were the cases of the Australian and Californian gold discoveries. In those cases the first effect was to raise retail prices and wages in Australia and California, and the subsequent effects were to raise the wholesale prices of goods exported to these countries, to increase the supply of gold in the banks in London and other centres of the trade, to encourage speculation and credit in these centres, to raise prices there, and finally to spread the increase of gold, of credit, and of prices over the trading world.

This was the direct effect of the great gold discoveries. Their indirect effect was probably much greater. Concurring, as they did, with other important factors—such as Steam and Free Trade—they invited colonisation and stimulated enterprise. The dying father in the fable told his sons to dig his farm for the treasure they would find there: and they found the treasure, not in gold or silver, but in the increased productiveness of the soil. Gold forms a small part of the present wealth of Australia or California. It has been said that no miner, however great his gains, ever made a permanent fortune. But without the stimulus given by the discovery of gold, the soil and climate of these countries might long have remained strangers to the industrious millions who now make them the source of untold wealth. The discovery oi gold has thus had an effect far stronger and wider

than can be traced in miners' wages, in the gold poured into the banks, or in the credit directly founded on that gold. Human hopes were excited, credit expanded, and enterprise grew. These hopes were realised; the credit on the whole proved sound, and enterprise prospered, not so much because more and more gold was found, as because new regions of varied production were brought into the domain of human industry.

It is worthy of notice that the first effect in this case was upon wages and retail prices, and, through them, upon wholesale prices. It is also worthy of notice that the effect in these cases was due to a sudden discovery of gold, and it may be doubted whether, if the increased supply had been gradual instead of being, as it was, sudden, the operation would have been the same in kind or in degree as it was. But, on the whole, it seems probable that any considerable increase in the supply of gold must always tend to increase the superstructure of credit, though to what extent and in what manner depends on various conditions, and is impossible to predicate with precision or certainty.

EFFECT OF A DIMINUTION IN SUPPLY OPERATES ON FLUCTUATIONS IN CREDIT THROUGH THE BANK RESERVES.

In the same manner, though we have no precise evidence on the point, it is probable that the effect of a diminution of supply of gold would be in some way to diminish credit. The history of the Australian and Californian supplies of gold gives us no help in determining how such a diminution would operate; for it is all but certain that it could not possibly operate by

the same channels, though in an opposite direction, by which those supplies operated.

Any great diminution in the gold supplies of the world would, however, most likely be visible in the reserves of the banks, and the effect of a reduction in these reserves upon credit and upon prices is beyond doubt. If it is true that a reduction in the supply of gold diminishes credit, and through credit prices, it must be through these channels that it affects them; for we know of no other channel by which it can come into contact with them.

When the reserves of gold becomes low—*i.e.*, low in proportion to the liabilities, according to the standard of proportion which may in each case have been adopted as the proper one—creditors take alarm and restrict credit by raising the rate of interest; in other words, by charging a higher price for capital. Debtors are then compelled to pay a higher price or to diminish their borrowings. If speculation is rife and profit expected to be large, they may pay the higher price; but if their expected profits will not bear the additional charges, they diminish or discontinue their borrowings, and the fabric of credit contracts; in other words, the circulating medium is diminished, and prices fall. In fact, precisely the same thing happens with credit, as a circulating medium, as with gold. When credit expands prices rise, when it contracts prices fall. So far, therefore, as the supply of gold affects the reserves, and so far as the state of the reserves affects credit, a diminution in the supply of gold affects prices, and makes them fall.

We may, therefore, not unreasonably conclude that a diminution in the supply of gold may lower prices; but that if it does so it must have that effect through the reserves, since, when prices are paid in credit and

not in gold, the reserves are the only channel through which gold can reach prices. It is a corollary from the above reasoning that if the effect of a diminution in the supply of gold has been to lower prices, that effect must be visible in a diminution of the bank reserves.

THERE ARE, HOWEVER, MANY OTHER AND MORE IMPORTANT CAUSES OF SUCH FLUCTUATIONS.

But whilst it is probably true that an increase or a diminution in the supply of gold affects credit, and with credit prices, through the bank reserves, in the manner above described, it is perfectly certain there are many other causes of the fluctuations of credit; and it is also obvious that these other causes are far more important and efficient in their operation than changes in the supply of gold. Everything which increases the productive industry of mankind, everything which makes men believe that their industry is going to be more productive, leads them to borrow and to lend, to increase debt and credit, and thus to augment the circulating medium by which dealings are carried on. Everything which diminishes men's productive industries, or which makes men believe that their industry is going to be less productive, has an opposite effect. Times of sanguine speculation are times of high prices, and times of depression are times of low prices; but no one will attribute the periods of speculation and of reaction to which we are accustomed, and the changes in price which accompany them, to an increase or a diminution in the supply of gold. The speculative manias and the reactions of 1825, of 1837–39, of 1847, of 1857, of 1866, all accompanied by great changes in prices, were due to many different causes. They may have been aggravated or alleviated

by the good or bad management of bank reserves; but it is to the more or less well-grounded opinion of men concerning the future results of their industry and their dealings, and to the thousand different causes which go to create that opinion, that these changes were really due. In these instances it was no great increase of gold which caused the high prices; it was no great loss of gold which caused the low prices; these were due, the one and the other, to the rise and collapse of credit from causes independent of gold. If the visible stock of gold had in these cases any effect on credit and prices, it was by way of check on undue speculation, and fixing a limit beyond which it was unsafe to go without danger of bankruptcy. The real causes of these and similar fluctuations are to be found in all the various things which promote or check production, and which raise or depress human opinion concerning future profit: in good and bad seasons; in peace and war; in the railway, the steamship, and the telegraph; in the invention and development of credit itself; in the stimulus caused by the gold discoveries; in a thousand other facts, and in the sound and unsound hopes created by these facts; and in the reaction, sound or unsound, from these hopes. Gold may play the part of the water in the bottom of the boiler, and, possibly, of the governor which checks excessive speed; but, besides this there are the expansive and incalculable agencies of heat and steam which really do the work.

VII.—REGULATION OF CREDIT.

TWO MODES OF REGULATING CREDIT.

These views concerning credit and prices are confirmed by a consideration of the means which are

found efficient in controlling the fluctuations of credit, and of keeping them within due bounds. The obvious importance of such regulations is rendered still more obvious if we regard them as a means of giving stability to currency and of preventing mischievous fluctuations in price. There are two distinct modes of regulating credit.

I. A PROPER LAW OF DEBTOR AND CREDITOR, INCLUDING BANKRUPTCY.

The first limitation is, as noticed above, to be found in an efficient law of debtor and creditor, which shall insure, so far as law can insure it, that every promise to pay shall be punctually discharged. If, with Mr. Macleod, we regard coin as a debt to the community from the holder, the first point in this law is that the gold sovereign shall be what it professes to be, and what the nation promises that it shall be, viz., a piece of gold of a certain weight and purity. The second point is, that bank-notes, which are promises to pay a fixed quantity of sovereigns on demand, should be absolutely and immediately convertible into gold. Whether legal convertibility is of itself sufficient to secure actual convertibility, or whether further steps are necessary for that purpose, need not be discussed here. The point is that the note will be sound credit if gold can actually always be obtained for it on demand. The third point, which is really as important as the others, so far as fluctuations in prices are concerned, is that general credit shall be sound—in other words, that people shall be bound to pay their debts, and shall feel the consequences if they fail to do so; that is, that they shall be visited with severe penalties if they deliver, issue, or circulate promises to

pay, without having sufficient reasons for believing that they will be able to perform them.

The point of view from which a law of bankruptcy or of debtor and creditor is generally looked at is that of the injury done to the creditor. But this is only a part of the mischief done by insolvency. The creditor is often a person little to be pitied, who has, by his own carelessness or dishonesty, contributed to the failure by which he suffers. But insolvency is a public evil. The creation of false credit, the making of promises to pay where there are no means of performing them, does just the same public mischief as the issue of bad money. It causes, first, an inflation and then an undue collapse, and alters prices, to the injury of the honest dealer, just as the issue of bad money does. The recent Bankruptcy Act was not only a creditors' Act, or a means of punishing dishonesty, it was a remedy for unsound circulation. And any further measures of the same kind, such as a bill for the better liquidation of joint stock companies which has been so long in contemplation, should be looked at from this point of view.

2. RAISING AND LOWERING THE RATE OF DISCOUNT.

The law of bankruptcy operates by way of penalties on the undue creation of credit. There is another method of regulating credit, viz., the raising of the rate of discount or interest, which operates upon credit by making it more difficult or more costly to obtain credit. It is peculiarly instructive for our purpose, since it operates upon the whole circulating medium, whether consisting of credit or of gold, and helps, more than anything else, to illustrate the relation between them.

To raise the rate of discount is to raise the price of

capital. It makes borrowing more expensive and more difficult, and thus prevents or restricts the increase of the circulating medium, whether consisting of credit or of gold, with which men make purchases. It is the means by which the holders of the gold reserve, when they find that it is falling too low, prevent gold from leaving the country, or recall it. The fact that this plan of checking undue speculation, of restricting credit, of lowering prices, and of keeping a reserve of gold, is acknowledged to be successful, whilst the limitation of credit in the form of bank-notes, attempted by the Act of 1844, was unsuccessful, is a strong confirmation of Mr. Macleod's views. A restriction of credit, when it operated on bank-notes alone, failed in effecting the objects above mentioned; when it operates on all forms of credit it is successful, or at any rate as successful as any attempt to regulate human action in the pursuit of gain is likely to be.

The rate of discount has special interest for us, since it is notorious, from the bank returns, that the bank rate has not been higher or more fluctuating since the demonetisation of silver than it was before; and several witnesses have urged that this is conclusive evidence that there has been during that period no comparative scarcity of gold. This argument is very important. As I have said above, no relation between the supply or stock of gold and wholesale prices has been shown to exist, unless it is to be found in the state of the bank reserves of gold, and in the steps necessary to maintain these reserves. If, therefore, prices have fallen from a scarcity of gold, that scarcity should be shown in the bank reserves. But no such scarcity has been shown. The reserves have been as full as ever, and there has been no increased difficulty in maintaining and replenishing them.

On the other hand, it is said that the rate of discount is the price of capital and not of gold; that it depends on causes quite independent of the supply of gold, and that it may be high or low with either high or low prices, and with either a plentiful or a deficient supply of gold.

There can be no doubt that the rate of discount or of interest does not at all times, or indeed in general, fluctuate with the supply of gold. If the stock of gold, relatively to demand, were twice as great as it is, borrowers might borrow twice as many sovereigns, but, *cæteris paribus*, the rate of interest would not be affected. Ricardo showed very clearly that an increased supply of gold or increased issues of bank-notes could not *permanently* affect the rate of interest. But he adds a note that he assumes "confidence"—*i.e.*, credit—to remain the same. And he admits that a sudden increase of currency may lower the rate of interest.[1] That this was its immediate effect in the case of the Australian and Californian discoveries seems to be clear.[2] And it seems equally clear that a sudden diminution of the supply would raise the rate of interest. This is, in fact, what happens in every commercial crisis or panic.

The way in which the matter presents itself to me is as follows. There is a certain amount of reserve of bullion, which each commercial nation according to its different habits and circumstances thinks necessary. The proportion of this to dealings, to credit, to liabilities, differs in different countries, and probably from time to time in the same country. Upon this an immense fabric of credit is erected; or, rather, I should

[1] Ricardo: *High Price of Bullion*, MacCulloch's edition, p. 286.

[2] See Tooke and Newmarch's *History of Prices*, vol. vi., pp. 232—236.

say, immense system of barter, which in form consists of promises to pay gold. In general, no one dreams of gold or of liability to pay gold. Credit rises and falls, and with credit prices, from a thousand circumstances quite independent of the supply of gold, and prices may be high or low with the same quantity of gold. In times when men are sanguine, credit may be great, prices may be high, and the rate of discount may be high too, because, though credit is great, the demand for capital is greater still. When men become less sanguine, credit may diminish, prices may fall, and the rate of discount may fall also ; because, though credit is less, demand is less also.

But an increased supply of gold, especially if sudden, may, and probably will, stimulate credit and raise prices. In such a case credit will be expanded, prices will be high, and the rate of discount, which will at first be lowered, may afterwards become high also, if the demand rises as fast as, or faster than, the supply.

This is what actually happened in the case of the Australian and Californian gold discoveries. In 1851, 1853, when the first new supplies arrived, the metallic reserves were increased, the rate of discount was lowered, cost of production was kept down, credit was high, and at the same time the demand for labour and goods rose, prices increased, and wages increased in a still greater proportion. But after a very short time the effect of the increased demand for capital was to raise the rate of discount, which, from this and other causes, began to rise in 1853, and was extraordinarily high in 1855–1857, whilst prices still rose until the latter year, and wages rose still more and still longer.[1]

On the other hand, when credit has fallen so low that

[1] See Tooke and Newmarch's *History of Prices*, vol. vi., pp. 232—236.

men see before them the possibility of having to redeem their promises in gold; or even when, without actual consciousness of this sort, the reserves in the banks fall below the conventional limit;—a need for gold is felt to be possible; and the rate of discount is raised, in order to keep it or to recall it from foreign countries. In this case, when, *ex hypothesi*, it is capital in the form of gold, and not credit or any other form of capital, which is needed, the rate of interest or discount becomes, in fact, the price paid for the use of gold; and, whenever this is the case, a comparison of the different rates of interest at different periods becomes, like the prices of other articles, a real test of the comparative abundance or scarcity of gold.

RECENT FACTS CONCERNING THE RESERVES AND RATE OF DISCOUNT.

Under these circumstances both the reserves of gold in the banks of the civilised nations, and the rate of interest, become important. Dr. Soetbeer has given us an estimate or account of these reserves for several years (1877–1885), and they are as follows:—[1]

	Million Marks.		Million Marks.
1877	2,890	1882	4,070
1878	2,850	1883	4,600
1879	3,500	1884	4,880
1880	3,790	1885	5,040
1881	3,900		

There has, therefore, during the period in question been no reduction in the bank reserves of gold but, on the contrary, a large increase.

Dr. Neuman Spallart,[2] after pointing out that in the

[1] *Materialen*, 1886, p. 70.
[2] *Uebersichten der Weltwirthschaft*, 1887, p. 454.

last fifteen years the whole circulation of the civilised world, including gold and notes, had not much altered in amount, says :—

"The special characteristic of this last period is that enormous quantities of the precious metals have been collected in the treasuries and reserves of the banks; the increase of dead and unproductive treasure from 1876 to 1885 may be reckoned at more than 2,400 million marks (£12,000,000); and from these facts, coupled with the increased use of commercial and banking credit, it is clear that the supply of money (Goldstand) in the markets of the world was an abundant one, and the rates of discount sank to what would before have been considered an impossible minimum."

In the Appendix to the third report of the Depression of Trade Commission, pp. 370 to 374, and in Dr. Soetbeer's *Materialen*, Part VI., we have a statement of the rate of interest or discount for a series of years. From these tables it appears that the average rate of discount of the Bank of England was :—

For the five years ending 1865 . . .	£4	17	6
" " " 1870 . . .	3	11	7
" " " 1875 . . .	3	14	10
" " " 1880 . . .	2	18	3
" " " 1885 . . .	3	8	2

The records of the banks of France and Germany tell a similar story of increased reserves with no higher rates of discount.

If, again, we look to the fluctuations in the rate of discount—which, even more than the actual amount of the rate, tell us what have been the needs for gold and the apprehensions of the loss of gold (the hoisting of the danger signal, as it has been called)—we find, indeed, that in 1873 there was a quite unusual number of fluctuations—*viz.*, twenty-four—in the course of the

year. But this is just what we should expect, considering that in 1873 came the collapse after the unprecedented inflation of the previous years, the first great German demand for gold, and the payment of the French indemnity.

If, however, instead of taking the single year 1873, we take the thirteen years, 1873 to 1885 inclusive, and if we compare them with the thirteen years preceding 1873—*i.e.*, 1860 to 1873 inclusive—we find that the average number of fluctuations in the rate of discount in the Bank of England was 10 per cent. per annum in the years 1860 to 1872, and only $8\frac{1}{2}$ per cent. in the years 1873 to 1885.

More striking than any figures is the diagram[1] of the rates of discount from 1836 to 1885, giving the changes month by month in a form which strikes the eye. Any one who looks at this will, I think, be satisfied at a glance that, if the rate of discount affords any evidence of an abundant or a deficient supply of gold, there is nothing in the rates for the period subsequent to 1873 to show that there has been any less abundance of gold, or that there has been any greater difficulty in retaining or recalling gold during that period of alleged comparative scarcity and of low prices, than there had been in the previous period of alleged comparative abundance and of high prices.

It may, perhaps, be said that the diminution of supply of gold, or increase of demand for gold, in 1873, had an influence at the time on the rate of discount, that this influence was then exhausted, and that, according to Ricardo's view, it cannot be expected to have had any permanent influence on that rate. But, if so, the same argument applies to its influence on the fall of prices. The fall of prices has been more or less continuous since 1873; and a diminution in the

[1] Published by Bates and Hendy, 37, Walbrook.

quantity of gold, which exhausted its effect on the rate of discount and on the reserves in the year 1873, cannot have had a continuous effect on credit and prices for the following fourteen years.

If, then, the theory above suggested is the true one, the figures of the gold reserves and of the rate of discount do show, as the witnesses above referred to have urged, that there has been no such deficiency in the supply of gold, in the period since 1872, as to account for any contraction of credit or lowering of prices; and that for the causes of such contraction and reduction we must look elsewhere.

IMPORTANCE OF THE ARGUMENT FROM THE RATE OF DISCOUNT.

The strength of the argument lies in the fact that if we put aside the cases of retail prices and of wages, which are considered below, and which, as we shall see, scarcely constitute exceptions, no connection has yet been shown to exist between gold and prices other than that which is due to the operation of the gold reserve upon credit and of credit on prices. If any other such connection exists it rests with those who attribute the fall in prices to scarcity of gold to show that it exists; and though challenged to do so, they have not done it. If no other such connection exists, and if the gold reserve is the only point of contact between the stock of gold and prices, then the level of the gold reserve, and the rate of discount necessary to maintain it, give trustworthy answers to the question whether prices are lowered by a deficiency in the supply of gold. An ordinary level of gold in the reserve, maintained by an ordinary and ordinarily steady rate of discount, show that credit has not been restricted,

and consequently that prices have not been lowered, by reason of the want of gold.

The tendency of a high rate of discount is to lower prices, and of a low rate of discount to raise prices, by operating on credit. But it does not follow that this operation is uniform or universal. High prices may go with a high rate of discount and low prices with a low rate. The rate of discount is the price of capital, and varies with the proportion of demand to supply. The supply may be large, but if the demand is high, as it is in times of great speculation, the price or rate of discount may also be high. In such a case a high rate of discount, expanded credit, and high prices will go together. The years 1854 to 1858, in which the effect of the gold discoveries must have been specially felt, were years of an unusually high rate of discount, no doubt because the stimulus given to enterprise had expanded the demand for capital still more than it had expanded the supply. So in bad times a low demand, a low rate of discount, contracted credit, and low prices may go together, as they have done lately.

Lowered prices, less demand for capital, and smaller use of capital may be due to many causes, and amongst others to contraction of the supply of gold. If it could be shown that the converse of what happened in the case of the Australian and Californian discoveries had happened recently—viz., that by reason of a diminished supply of gold sovereigns wages had first fallen, that then retail prices of things used by workmen had fallen, and finally wholesale prices—there would be reason for saying that the ultimate cause of the lowering of wholesale prices, of the contraction of credit, and of the smaller use of and demand for capital, was to be found in a deficiency of gold. But it is notorious that this is not the case. What has been shown is a lowering of

wholesale prices, coupled with a lower demand for and use of credit and capital, and if wages and retail prices have fallen it is as a consequence of the lowering of wholesale prices.

Any lowering of wholesale prices may be due to a great number of causes; and might possibly be due, amongst other things, to a deficiency of credit caused by a deficiency of the gold on which credit is based. If, however, it were due to these causes it would only be through the cost or difficulty of obtaining capital, and evidence of this cost or difficulty would be seen in the price paid for capital, *i.e.*, in the rate of discount. But, as a matter of fact, no such evidence is forthcoming, and its absence affords a strong presumption, if not proof, that the low prices and small use of or demand for capital are not due to want of gold.

If we could draw curves accurately representing—

1. The state of the reserve;
2. The rate of discount;
3. The expansion and contraction of credit;
4. High and low prices;

we should probably find no exact relation or proportion either of agreement or opposition between them, except between the two last. High credit would commonly accompany high prices, and low credit low prices.

A great addition to the reserve would probably cause or precede a lowering of the rate of discount, expansion of credit, and higher prices; and a sudden fall in the reserve would commonly precede a raising of the rate of discount, contracted credit, and lower prices. But a low reserve would often, if not generally, be found with a low rate of discount, and a low rate of discount with contracted credit and low prices; whilst a full reserve might be found with a high rate of discount, expanded credit and high prices.

So various and so complicated are the different factors which go to make the fluctuations in these different commercial phenomena that it is only in very few cases that we can predicate any fixed or certain relation between them, or prophesy the one from the other. One thing, however, we can do. If at a given time a certain feature is absent from one of them, we can make sure that this feature is not the cause of changes in the others. Where there is no sinking in the reserves of gold, and no abnormal rise in the rate of discount, we may safely conclude that any contraction of credit and fall of prices that may have taken place are not due to any such sinking or to any such rise. If, in addition to this, it is true that it is only through the reserves and the rate of discount that a deficiency in the supply of gold can become felt, we may conclude further that any such contraction of credit and fall of prices are not due to a deficiency in the supply of gold.

When the facts above noticed concerning the reserve and the rate of discount are pointed out, we are sometimes told that they are the consequence of the depression of trade. This may be true, but it is a strange argument in the mouths of those who attribute the depression of trade to a want of gold. "There is a want of gold which is causing bad trade, and at the same time bad trade is causing abundance of gold!"

In short, if we assume that low prices are due to a deficiency of gold, we find that assumption to be inconsistent with the only evidence that we possess concerning the effect of gold on prices, viz., that furnished by the reserves and the rate of discount. But if we assume that low prices are due to other independent causes, such as the cheapening of production and transport, or to over-production and a collapse of

credit, we have a complete and consistent explanation of the actual state of the reserves and the rate of discount.[1]

DEMAND FOR GOLD AS A MEDIUM OF EXCHANGE FOR RETAIL DEALINGS AND WAGES.

It is said above that the only connection of gold with prices is to be found in the relation which the reserves and the means adopted for maintaining the reserves bear to credit, and this is perfectly true with respect to wholesale prices. But it may be said in reply that in this country there is also a demand for gold for retail dealings, and for wages, where gold is to a large extent still actually used as a medium of exchange. This is true; but, in the first place, the evidence before us, whilst it shows wholesale prices to have fallen, does not show retail prices and wages to have fallen—or to have fallen, if at all, to anything like the same extent. Agricultural wages have indeed fallen in nominal amount,[2] though not to the same extent as the price of food; but this is obviously due to the fall in wholesale prices of agricultural produce caused by foreign competition. In the second place, the supply of gold for the purpose of retail payments and wages is drawn from the bank reserves. When the autumn demand for cash sets in, it is from the bank reserve that the gold, or notes equivalent to gold, are drawn, and when this demand ceases it is to the bank reserve that the gold and notes return. In fact,

[1] The relations between Gold, the rate of Discount, and the Prices, both of Goods and of Investments, are further discussed in the article headed "Gold and the Rate of Discount," pages 140 to 151 below.

[2] This statement requires qualification. See paras. 14 to 22 in Mr. Shaw Lefevre's reply to the Bimetallic Report of the Agricultural Commission, No. 28, in the series issued by the Gold Standard Defence Association.

the bank reserve is the reservoir from which all demands, wholesale or retail, are drawn; and, therefore, in the state of the bank reserve, and in the measures adopted to maintain and replenish it, we have an index to the whole demands of the country for gold, including the demand for retail transactions and wages; and if the reserve shows no signs of exhaustion or deficiency, and if no special efforts are needed to maintain it at its ordinary level, the conclusion seems to be that, if retail prices and wages have fallen, they cannot have fallen for want of a sufficient supply of gold.

WANT OF STATISTICAL INFORMATION.

It is to be regretted that we have not at our command more complete statistics on this subject. If we had materials from which to draw accurate curves representing for a period of years for all important trading countries—

1. Commercial credit in the shape of bills;
2. Banking credit or liabilities in the shape of notes and deposits;
3. Banking assets, distinguishing
    - *a.* Temporary securities,
    - *b.* Permanent securities,
    - *c.* Metallic reserves in gold and in silver;
4. The rate of interest and discount;
5. Commercial prices;

we should be able to speak with more certainty of what must now be in a great measure theory and opinion. To what extent it may be possible to procure this information is well deserving of consideration; but I fear that there is no prospect of procuring

it, or any approximation to it.[1] Under these circumstances the above suggestions are put forward as consistent with the known facts. They appear to me to be at any rate more satisfactory than the hypothesis which attributes the recent fall in prices to a supposed deficiency in the stock of gold.

VIII.—SUMMARY.

SUMMARY.

To sum up this long paper. It deals only with one out of the many questions raised in the recent discussions on currency—viz., the question whether, assuming that there has been a general fall in prices, and assuming also that there has been a deficiency in the supply of gold (both of which are matters to be proved), it has been proved that the fall in prices has been caused by the want of gold.

There are clearly—in improvements of production and transport, as well as in temporary over-production and collapse of credit—other causes for the fall in price of many, if not of most, of the articles which have fallen; and it has not been proved that the fall, or the greater part of it, is not due to such other causes.

The distinction is a very important one. The effect of a fall in price arising from a deficiency of gold is of no advantage to the world, and causes injury to debtors; whilst the effect of a fall in price arising from increased abundance of the article sold is, generally speaking, and in the long run, an advantage to the world, and does not cause injury to debtors.

[1] See, for such statistics as have been procured, Mr. J. B. Martin's paper on bank-notes in the *Journal of the Institute of Bankers* of March, 1880, and Mr. Dick's paper on banking statistics in the same journal of June, 1884.

The production of certain articles may, however, have been in excess, and to this cause, and to the consequent collapse of credit, some part of the fall in price may be due. Even if so, it has nothing to do with want of gold.

Assuming, however, that the fall in price is due to the state of the circulation and not to the increased abundance of the articles sold, it does not follow that it is due to a want of gold.

Gold is both a measure of value and a medium of exchange, but is not the only medium of exchange.

Credit or debt in advanced countries is taking the place of gold as a medium of exchange, and in wholesale dealings has taken its place altogether.

It is to credit or debt, therefore, and not to gold, that we must look as the immediate regulator of prices. The value of gold, which varies inversely as price, depends upon supply and demand. When credit takes the place of gold, the demand for gold as a medium of exchange *pro tanto* ceases. Credit has taken the place of gold in all wholesale and in many retail dealings, and is taking its place more and more. The notion, therefore, that increased trade and population necessarily creates a greater demand and a higher value for gold as a medium of exchange is essentially false, and to ascertain what the demand for and consequent value of gold really is, we must ascertain in detail for what purposes gold is really used and to what extent.

Credit, however, has certain relations to gold, and if it could be shown that the quantity of credit varies exactly with the quantity of gold, a diminution in the supply of gold would affect credit proportionately, and with credit prices. But this cannot be shown. The real relations between gold and credit appear to be the following :—

Gold is the measure of value as well as a medium of exchange, and as all credit is expressed in terms of gold, any alteration in *value* of gold affects proportionately the *value* of each item of the whole fabric of credit. The value of gold depends upon demand as well as on supply, and the cessation of the demand for gold as a medium of exchange *pro tanto* diminishes its value, and with it the value of each item of credit of which it is the measure.

At the same time gold is only the measure of value by being a possible medium of exchange, and credit is legally convertible into gold. Some reserves of gold must be kept to meet this liability. They are, however, comparatively small, and seldom used or needed in actual payments, and day by day they are needed and used less and less. Gold is a potential medium of exchange, but bears a small and ever-decreasing proportion to credit, which is the actual medium.

Alterations in the quantity of credit are of two different kinds :—

There is, first, the organic development of credit and of clearing, which in the form of bills, bank deposits, &c., and of the "set-off" or "clearing" of these against one another is constantly progressing, and is causing credit to become more and more, and gold to be less and less, the medium of exchange. This growth of credit, and of clearing, has no direct dependence on the quantity of gold, and is likely to be more rapid as the quantity of gold becomes less. It supplements gold, and its tendency is to arrest a fall in prices.

There is, secondly, the temporary expansion and contraction of credit, which we know as good and bad times. This has a very great and overpowering influence on prices.

A great and sudden increase in the supply of gold is one of the causes of expansion of credit. Since credit consists in form of obligations to pay gold, the possibility of obtaining gold with which to pay is a limit of credit, and restricts its undue expansion.

But there are a number of other causes, such as improvements in production and transport, scientific discoveries, war and peace, &c., &c., which have far more powerful effects on the expansion and contraction of credit. What happens to gold is only one among many causes, and not among the most efficient. Credit may be high so as to cause high prices, or low so as to cause low prices, without any change in the supply of gold.

The elasticity of credit makes it a most powerful, and also a most dangerous, instrument. The remedies for its improper extension are instructive and illustrative. The first remedy is a good law of debtor and creditor, which makes it penal to issue false or unsound promises. It is necessary, not only for the sake of justice to the creditor, but because improper credit is an undue inflation of the circulating medium.

The second remedy is to raise the rate of discount. This operates on all capital, gold or money as well as credit. It makes them more expensive and difficult to obtain, and thus restricts the use of them and lowers prices.

This is done when the reserves of gold run low. As all credit is in form a promise to pay in gold, there is an ultimate possibility of a demand to pay in gold, and the reserve is kept to meet this possibility. It thus forms a connection, and is the only known connection, between the quantity of gold and prices. Consequently, the fact that in the period since the demonetisation of silver the reserves have been main-

tained at their former amount, and even on the whole at a higher amount than they were before, and that this has been done without raising the rate of discount higher or more often than before, affords a presumption that the fall in prices has not been due to a scarcity of gold.

CONCLUSION.

This paper is confined to a small part of the case which the Gold and Silver Commission had to consider. It does not touch the question of exchanges, the mischief or inconvenience which India is suffering, or the dislocation of trade between gold and silver-using countries.

It relates solely to the so-called appreciation of gold; and, in dealing with that question, it leaves on one side the allegations that all gold prices have fallen; that this fall is an evil; that it has arisen from the demonetisation of silver; and that it can be remedied by the rehabilitation of silver—all of which have to be proved. It leaves also on one side the cardinal questions whether a deficiency in the stocks of gold has been proved, and whether improvements in production and transport, coupled with over-production and collapse of credit, which have certainly contributed to the fall in gold prices, will not account for the whole fall.

It deals at greater length with the questions—"Whether there is any such connection between gold and prices as to justify us in assuming that a deficiency in the supply of gold, supposing it to be proved, is necessarily followed by a proportionate fall in prices?" "Whether the introduction and growth of credit as a circulating medium has not materially altered the con-

ditions of the problem?" and "Whether, so far as the connection between gold, credit, and prices can be traced, the present actual circumstance of that connection do not raise a presumption that there has been no such deficiency in gold as to affect prices?"

I am conscious of the great difficulty of the questions raised in this paper, and of the probable incompleteness of the answers I have suggested. The path is uncertain; the ground full of pitfalls; and the light wanting—

> "Quale per incertam Lunam sub luce malignâ
> Est iter in silvis."

It was written, so far as the purpose of the late Royal Commission was concerned, as an argument to show that we have at present no right to assume that the recent fall in prices is owing to a deficiency in the supply of gold, much less to advise any serious alteration of our currency on that ground.

But the questions raised by it are of great importance, theoretically and practically, without any reference to the question of bimetallism, or indeed to any special practical measure; and it is as a contribution to the discussion of economical questions that I now republish it.

GOLD AND THE RATE OF DISCOUNT.

This paper is supplementary to the observations on the rate of Discount contained in the preceding pages. It was suggested by various criticisms, and especially by an interesting pamphlet published in 1888 *by Mr. Charles Gairdner, of the Union Bank of Scotland.*[1]

ARGUMENTS AGAINST THE SCARCITY OF GOLD FOUNDED ON LOW RATES OF DISCOUNT.

Witnesses who deny a scarcity of gold have used an argument founded on the rate of discount.[2] It is a fact that the rate of discount has been lower and less fluctuating during the last fifteen years than during the fifteen years which preceded them; and since to raise the rate of discount is the acknowledged mode of procuring or maintaining a supply of gold—since, in short, it is the price paid for the use of gold—it is argued that the demonetisation of silver, which occurred during the early part of this period, cannot have had the effect of causing a scarcity of gold; and that there has in fact been no scarcity of gold in that period compared with previous years.

It is further argued that no gold is actually used in wholesale dealings; that the only known connection

[1] "Constitution and Course of Money Market," Maclehose, Glasgow, 1888.

[2] See, for this argument, pp. 121 to 132 *ante*.

between gold and wholesale prices is an indirect connection arising out of the relation which the rate of discount bears to the gold reserves of the banks on the one hand and to prices on the other; that an additional supply of gold tends to a fall in the rate of discount and to a rise in prices; whilst a scarcity or want of gold tends to a rise in the rate of discount, and a rise in the rate of discount to a fall in prices; and that, consequently when it can be shown that the ordinary supplies of gold have been maintained without any extraordinary rise or fluctuations in the rate of discount, it may be inferred that there has been no such scarcity or want of gold as to cause a fall in prices. In short, it is argued that the state of the rate of discount for the last fifteen years affords a strong presumption, if not proof, that there has been no unusual want or scarcity of gold, and that any fall of prices which may have occurred is not due to any such want or scarcity.

ARGUMENT IN FAVOUR OF SCARCITY OF GOLD FOUNDED ON LOW RATE OF DISCOUNT.

On the other hand, competent persons have urged that a low rate of discount is not only entirely consistent with failing supplies of gold, and with prices lowered by reason of such failure, but is exactly what might be expected from such causes; and that, consequently, so far from proving that there has been no scarcity of gold, a low rate of discount tends to show that there has been such scarcity. In support of this view it is said that when prices of goods are falling, the demand for money is weak; the money market is overstocked; and the price traders will pay for it—in other words, the rate of discount—is low. At the same time the demand for long investments increases; the prices of

securities rise; and the interest which can be obtained on such securities falls. This, it is said, is especially the case with securities the interest of which is fixed and is payable in gold; since the rise in the value of gold, due to its actual and apprehended scarcity, gives additional value to such securities. Such, it is said, is the state of things which has actually been happening during the last fifteen years, and which is now going on; and so far from being inconsistent with the views of those who maintain that there has been and is a scarcity of gold, it gives support to them.

Both of these arguments, on the one side and the other, deserve careful consideration, for both of them are advanced by thoughtful and experienced men. In the following observations I have tried to weigh and reconcile the opposing arguments, feeling at the same time how abstruse the subject is, and what special difficulties it presents to one who is not familiar with the practice of the money market.

The question with which we are principally concerned is, it must be remembered, not so much whether a low rate of discount is consistent with low prices, or whether low and falling prices tend to produce a low rate of discount, as whether the low prices are themselves caused by a want of gold.

WHAT IS THE "MONEY" THAT MEN BUY WITH DISCOUNT?

We ought in the first place to understand clearly what the thing or substance is which men buy with discount, and for which under different circumstances they pay a higher or lower rate of discount. In the former paper I have tried to give some answer to this

question. The discussion is too long to be repeated here; but the following is a summary.

There is something—call it Floating Capital, or Currency, or Circulation—out of which all wholesale and many retail purchases are made. In the phrase of the city—which I believe to be more accurate than the language of economical writers and philosophers—it is called "Money," and it is by this name that I shall describe and refer to it in these observations. It consists partly of gold; still more of bank-notes; and most of all of bankers' credit—operated on by cheques. These two last have some reserves of gold to back them; but the quantity of gold, at any rate in the case of credit, bears no fixed relation to the quantity of credit based on it, and is often very small in proportion.

Discount, like interest, is the price paid for the immediate and temporary use of this floating capital or "money." It is, in fact, the hire or rent of "money" —but, unlike interest, it takes the form of a deduction from the amount lent. The rate of discount is the proportion which the discount or amount so deducted bears to the amount advanced.

The rate of discount depends on the proportion of the supply of this "money" to the demand for it; and of these two factors the demand is, as will be seen below, probably much more powerful in its immediate and temporary effects than the supply.

SUPPLY OF THIS "MONEY."

As regards the supply, the question what it is which creates it, and what it is that limits it, is not without difficulty. The supply probably represents both past savings and future expectations; things already realised and in existence, and things to be realised hereafter. It

has, as above mentioned, some relation to the gold reserves of the banks; but a very ill-defined, varying, and uncertain relation.

In times of pressure and panic, men think of the possibility of being required to pay in gold; the proportion of the whole mass of "money" to gold diminishes, the rate of discount becomes more and more the price paid for the use of gold; and the rate rises to a very high point. At other times an increase in the supply of gold may enlarge the reserves, increase the stock of "money," and lower the rate of discount, whilst a diminution in the supply may have the contrary effects. On the whole, however, in ordinary times the men who buy and sell money think little about gold; gold comes and goes with comparatively small effect on the rate of discount or on prices; and the proportion of gold reserves to the whole stock of "money" is very small.

But whatever the relation between gold and "money" may be, it is through this relation, and through this relation alone, that an increase or diminution in the supply of gold can affect the rate of discount; which, as we have seen, is the price paid for the use of "money." If therefore we find that at any particular time the rate of discount is low, as compared with the rate at other times, it appears to be quite fair to conclude, so far as the supply of "money" is concerned, that there is at that time no such diminution in the supply of gold as to diminish the supply of "money," and thereby cause an increased price to be demanded for the use of it.

DEMAND FOR THIS "MONEY."

There may indeed be such a diminution in the supply of "money" as would, if it stood alone, have this effect, but accompanied by such a diminution in the

demand for "money" as to counteract this effect and to keep down the rate of discount. But in such a case the principal factor would be demand rather than supply: and this brings us to the question, What is it that creates the demand for "money," and what is the effect of that demand on the rate of discount?

The demand for "money" depends on the expectation of a return which will repay and more than repay the advance and the interest or discount paid for the use of it. When the demand for goods is active; when men are sanguine; when the price of goods is rising and likely to rise;—manufacturers and traders will pay a large price for the use of "money," because they expect a large return. In such cases a high rate of discount, like all other high prices, tends to check speculative purchases; but it may become very high before it depresses a sanguine market, and a high rate of discount is consistent with a prolonged period of active speculation. When the demand for goods is uncertain; when men are depressed; when the price of goods is falling and likely to fall;—manufacturers and traders will pay a comparatively small price for "money," because they expect a smaller return; and then the rate of discount falls. "Money" may in this case be abundant and cheap, and this has a tendency to promote speculation. But the demand is a more powerful factor than supply, and with a falling market for goods, a low rate of discount is to be expected, however abundant "money" may be.

SUPPLY OF AND DEMAND FOR THIS "MONEY" NOT A SUPPLY OF OR DEMAND FOR GOLD.

The supply of and demand for "money," of which the rate of discount is the result and index, is, it must be remembered, not a supply of or demand for gold. In the ordinary transactions of commerce—that is, in the purchase and sale of goods—no gold is used. The "money" which is used by the trader in his purchases of goods is part of the "floating capital" above referred to; and the price for which he sells his goods is part of the same floating capital. Both the one transaction and the other are practically settled by cheques. Except so far as this "money" or "floating capital" itself consists of or depends on the available quantity of gold, gold does not enter into the transaction at all. It becomes obvious therefore how remote and comparatively unimportant the effect of any alterations in the stock or supply of gold which take place pending an ordinary trade transaction must be upon the result of that transaction, or upon the rate of discount which the trader is willing to give. The changes which affect the trader in his ordinary operations are changes which take place, or which he apprehends as probable, between the time at which he commences his operation, makes his first purchases and obtains his first advances and the time when he repays his advances and concludes his sales. These changes may possibly be changes in the supply and value of "money"; but even where this is the case, it is in the highest degree improbable that such changes in the value of "money," happening in so short a time, are due to changes in the stocks or supplies of gold. The changes to which the trader or manufacturer really looks are changes affecting the special articles in which

he trades. The really important factor is the demand, actual or apprehended, for these articles. It is this demand, and the prices depending on it, which induce the trader or manufacturer to give a higher or a lower price for the "money" with which he makes his purchase; it is this demand therefore which governs the rate of discount more than the supply of "money."

EFFECT OF RISE IN VALUE OF GOLD ON PRICE OF SECURITIES.

It remains to consider the suggestion that a rise in the value of gold is a principal factor in raising the price of securities, and diminishing the interest on investments, especially such as have a fixed annual return. In cases where the proceeds of the investment are not fixed sums, but are to depend on produce and its future price, then the price or value of the investment will no doubt be affected by any circumstances which affect present apprehensions concerning the future price of such produce. In fact the purchase of the investment will be governed by the same conditions which govern advances for immediate trading purposes, only that they will be made with a view to a longer period.

But the argument above mentioned refers specially to the case of investments which give a fixed annual return. As regards these it may be argued with much apparent force that if it is the fact that gold is rising in value, and if there is an apprehension of a further rise in its value, such an apprehension will have an effect in inducing investors to give a large price at the present time for a fixed annuity payable in gold sovereigns or other gold coins in the future. This view is, however, open to criticism. It assumes that

the investor is buying with his "money" gold or promises to pay gold. But this is not the case. What is paid as purchase money for the investment is the "money" of the present market, which, as we have seen, is not gold. What is to be received by way of interest or annual proceeds of the investment is also the "money" of the market—the "money," not of the present, but of a future market. A purchase of consols, *i.e.*, of a fixed annuity at 3 or $2\frac{1}{2}$ per cent., is not effected by the transfer of so many sovereigns, nor is it likely that the annuity will ever be actually paid in the form of sovereigns. The real value of the future annuity will depend, just as the real value of the purchase money now depends, on the purchasing power of "money" for the time being. So far as this "money" consists of or depends upon the abundance or scarcity of gold, so far, and so far only, will the abundance or scarcity of gold affect the real value of the annuity.

REAL CAUSES OF RISE IN PRICE OF SECURITIES.

The more efficient causes for such a rise in the price and fall in the interest of securities, as we see at the present time, seem to be the following :—

First :—The abundance and cheapness of "money" in the market, arising partly from large savings, partly from the difficulty of employing it to advantage in trade ; and

Secondly :—The consequent growing conviction that the returns which accumulated capital can earn or expect to earn in any shape are becoming smaller and smaller.

These considerations operate as powerful motives to investments which promise for a series of years an annual return bearing a fixed proportion to the amount

invested, whether it be measured in gold, or in "money," or in anything else; and they have probably a much greater effect on men's minds than any speculations concerning the future abundance or scarcity of gold.

ANSWERS TO THE ABOVE ARGUMENTS UNSATISFACTORY.

To the preceding arguments the following answer has been made. Admitting that the effect on prices of any increase or diminution in the supply of gold must operate by means of the rate of discount, and accepting entirely the opinion that there are other causes which operate more powerfully on the rate of discount, still, any alteration of the rate of discount caused by a decrease in the supply of gold must have had a permanent effect on prices, whilst alterations otherwise caused may have had only a temporary effect. This, it is said, happens as follows:—

Where a diminished supply of gold has caused a rise in the rate of discount, and where this rise has caused a fall in wholesale prices, gold has been withdrawn or withheld from the businesses and operations in which it is now actually used, *i.e.*, from some retail business and from wages; the retail prices in this business and wages have fallen in consequence, not to rise again; and the fall in wholesale prices caused by the failure of gold has become stereotyped.

The subtlety and refinement of this answer is a good illustration of the difficulty of bringing currency hypotheses to any practical test. The rejoinder seems to be that this supposed state of facts is entirely in the air; that such knowledge as we possess of the recent condition of wages in gold-using countries gives no support to it; that it is scarcely consistent with the

fact that gold reserves have during the last fifteen years been more abundant and more easily maintained than in the previous period of high prices; and that the argument itself admits that the supply of gold is only one, and that a subordinate one, of the causes which affect the rate of discount and the rise and fall of prices.

CONCLUSIONS AS TO RELATIONS BETWEEN RATE OF DISCOUNT PRICES, AND GOLD.

If the reasoning contained in the above pages is correct, it brings us to the following answers to the questions with which we started:—

First:—It is perfectly true that a low rate of discount is not only consistent with low and falling prices, but is what might be expected to follow from low and falling prices, whatever may have been the real cause of such prices.

Secondly:—It is also true that low and falling prices and a low rate of discount tend to raise the price of securities, and to lower the interest of investments with a fixed annual return.

Thirdly:—These circumstances, however, lend no support to the theory that the low or falling prices are due to a scarcity of gold. That theory assumes that there is some connection between gold and wholesale prices other than that which operates through the medium of the rate of discount. This assumption is necessary to the support of the theory, and it is not proved or supported by any evidence or argument whatever. If it could be shown that such a connection exists, and if it could at the same time be shown that there has been a diminished supply of gold, then there would be good reason for arguing that the recent fall

in prices originated in failing supplies of gold, and that the low rate of discount during the same period was a natural consequence of the same cause. But, in the absence of any such connection, the abundance of money in the market, and the continuance of a low and comparatively steady rate of discount during the whole period of falling prices, must be taken as strong evidence that the recent fall in prices has not been due to any deficiency in the supply of "money"; and that consequently it cannot have been due to any deficiency in the supply of gold. To put the same conclusion in other words:—The falling prices of the last fifteen years cannot have been dear "money" or dear gold, because during that time "money" has been comparatively cheap. But the falling prices may very well have been one of the causes for the continuance of cheap "money," because, whilst "money" has been abundant, falling prices have checked the demand for it which might otherwise have arisen.

The above reasoning also brings us round to the same conclusion, to which many other lines of argument converge, viz., that the main factors in recent economic changes are to be found in the supply of and demand for goods; and that it is these factors, rather than the supply of gold or even of "money," which in the main govern both the rate of discount and prices.

CORRESPONDENCE WITH PROFESSOR ERWIN NASSE ON THE FOREGOING PAPERS.

Being much interested in the paper sent to the Commission by Dr. Erwin Nasse, of Bonn, contained in the Appendix to the second Report of the Gold and Silver Commission, page 221, *I sent him the two foregoing papers, and put to him the three following questions for his opinion:—*

1. What is it that we buy with?
2. What creates it?
3. What limits it?

His answer is contained in the following letter of the 8*th June*, 1888, *which I print, with the subsequent correspondence, by his kind permission.*

TRANSLATION OF LETTER FROM PROFESSOR ERWIN NASSE TO SIR T. H. FARRER.

"Bonn, *June* 8, 1888.

"My Dear Sir,—Of the three questions which you put, the first—viz., 'What is it that we buy with?'—seems to me to be quite satisfactorily answered by

the reasoning and conclusions ('ausführungen') in your paper. We buy with metallic money and transferable claims. I should not, however, call metallic money a 'debt' or 'claim.' I can discover neither a debtor nor a creditor when I am in possession of metallic money. I possess a commodity, like other commodities.

"To the second question, 'What creates it?' I should answer, 'The need of trade for media of payment, operating through the agency of banks.' The immediate creators of the common media of payment, based on credit, are the banks. Of other claims or debts which circulate as money, the only ones which come near the claims on banks are bills of exchange, and these only within narrow limits. The banks create the credit, with which all payments can be made, either by changing claims which are non-transferable or not easily transferable into claims which are easily transferable; as, for instance, when they discount bills; or by opening a credit for their customers without any security in the shape of a counter claim, but in the trust that the customer will, when the time comes, be able to repay. The banks are, if credit is in a sound state, and if the law imposes no limits on their action, ready to create these media of payment by credit, because they make a profit by it. The persons who procure loans in order to get bank-notes or bank credits must pay interest; whilst the bank-notes or the bank credits which are operated on by cheques bear no interest. Such persons will only make this sacrifice when they need means of payment. *Consequently the mass of bank notes in circulation and of bank credits operated on by cheques increases in proportion to the demands of trade.*

"With reference to the last question—'What limits

it? '—which appears to me to be the most important and most difficult of the three: I quite agree in substance with your reasonings and conclusions ('ausführungen'). In my judgment, you show admirably how the credit, which serves as means of payment, consists of promises to pay gold; how for this purpose a gold reserve is needed; how an influx of gold operates on the reserve, and through it on the credit used in payments; what steps (changes in the rate of discount) are taken for the purpose of maintaining the reserve; and what influence they have on the credit used in payments, and on prices. I will permit myself one remark to complete the subject.

"The fear of being obliged to pay bank-notes or bank deposits in gold coin, and the depletion of the gold reserve thence arising, constitute the real obstacle to increase of the media of payment based on credit. Now there are two reasons why men want gold in respect of the media of payment based on credit, even when credit is sound. In the first place, there is the need of it for small payments in internal trade—*i.e.*, for payments which are too small to be made in bank-notes or cheques. In the second place, there is the necessity of sending gold abroad to settle the international balance of trade (internal drain and external drain). The former of these drains on the stock of gold can be reduced to a minimum by the issue of smaller bank-notes, and the further development of payment by cheques. I entertain no doubt that it will, as time goes on, dwindle more and more, if it does not disappear altogether. So much the more important does the international movement of gold become as a limit to the creation of the media of payment based on credit, even these movements are, as you say, narrowed by operations of credit; but by no means in

the same degree as gold payments in internal business. In a clearing-house, as, for instance, in London, all the balances may be paid in bank-notes or by cheques with complete exclusion of metallic money, when all the participating firms are in connection with a central bank. So all internal payments may be reduced in the last end to transfers in the books of the central bank, the common central treasury of the whole country. For international trade there is no such common central treasury, and therefore the balances must be paid in metallic money. In this respect the payment of gold becomes more and more important. I shall, therefore, in answer to the question, 'What limits it?' say, 'The flow of gold abroad.' If in any country the media of payment which are based on credit are too largely created, and if their excessive increase exercises an influence on the price of goods and services, there follows an outflow of gold to foreign countries; the metallic reserves of the banks are contracted; the rate of discount is raised; the rise in discount lowers prices, and diminishes the need for means of payment.

"In this way there comes to pass, as it seems to me, a great elasticity of money in countries with highly developed credit, and yet a correspondence with the metallic foundation on which the highly developed structure is raised.

"It is impossible within the compass of a letter to go farther into the details of these questions.

"I beg that you will make all due allowance for my remarks, which will, perhaps, in their brevity, appear vague or fragmentary, and have the honour to be, &c., &c., &c.,

"(Signed) ERWIN NASSE."

LETTER FROM SIR T. H. FARRER TO PROFESSOR ERWIN NASSE.

"ABINGER HALL, *June* 22, 1888.

"MY DEAR SIR,—I am much obliged to you for your letter of the 8th. I agree with it so far as the present state of things is concerned, subject to the following remarks :—

I. AS REGARDS THE NOTION THAT METALLIC MONEY IS A DEBT.

"The hypothesis that a gold sovereign or a gold mark is a debt or claim of the possessor against the community is Mr. Macleod's. It is part of his theory that all currency may be defined as a 'debt' or 'claim'; and I agree so far with you as to think that, if true, it is unnecessary for the purpose of our argument. It is a theory.[1]

[1] The views that may be taken of the hypothesis in question will probably differ according to different theories of value. Economists who trace value to cost of production point out that the difference between a sovereign and a sound promise to pay a sovereign is that the physical material of a sovereign costs a considerable amount of human effort, whilst the physical material of a promise to pay a sovereign—viz., a small quantity of paper and ink—costs nothing, or next to nothing. This, says Mr. Macleod, is of no importance, because the value of a thing is only what it will exchange for, and a sound promise to pay will exchange for exactly as much as a sovereign, and therefore is "currency," or "circulating medium," or "money," just as much as a sovereign. Both, therefore, are to the same extent, and in the same way, "orders for goods." Possibly the theoretical differences may be harmonised, if not entirely removed, by the consideration that a *sound* promise to pay implies something more than paper and ink—viz., solvency in the promiser; and that solvency in the promiser implies that he possesses, actually or potentially, some thing or quality which is equivalent—not perhaps in amount, but in its nature—to the human effort by which the gold sovereign is produced; and that, if he did not possess it, his promise would not exchange for as much as a sovereign. But for our present purpose it is not necessary to go into this argumnnt. If a promise

2. AS TO THE FORM OF DEBTS OR CLAIMS WHICH OPERATE AS MONEY.

"Mr. Macleod has, as it seems to me, firm ground to stand on when he treats various forms of claims or debts, such as bills of exchange or other securities for money, as currency. They do undoubtedly, especially in international transactions, perform many functions which might be performed, and which were formerly performed, by money. But there is a clear distinction between them and what the market knows as 'money'; and it is this 'money of the market'—*i.e.*, 'money at a banker's'—with which, as you say, we commonly buy and sell, and which affects prices. As regards other forms of debt or claim, such as bills of exchange, I suppose that the great majority are always turned into 'money at a banker's' before men buy and sell with them or with their proceeds.

3. AS TO THE USE OF GOLD IN SETTLING INTERNATIONAL BALANCES.

"I agree in your view, so far as regards the present state of things. But is not this state of things in course of alteration? Gold, as you say, goes abroad to settle international balances. But has it not even now, in many cases, been replaced by other means? Stocks and securities help to settle the balance of trade in goods. Perhaps they may themselves in some sense be looked on as goods. But there are other means of remittance which dispense with the use of gold more palpably and more completely. For

to pay one sovereign will in the common business of life exchange for as much as one sovereign, it has the same purchasing power and operates as circulating medium or currency in the same way and to the same extent as a sovereign. This is all we need for our purpose.

instance, it is common for bankers in England to have large accounts with bankers in New York, in Hamburg, in Calcutta. Often the bank, or financial house, bestrides the sea, and has one house in the one country and another house in the other. In such cases it merely needs a letter or a telegram to say, 'Of our capital we will employ £100,000 in London rather than in New York,' or *vice versa*, and the effect on the money markets of the two cities, and on the prices, will, as it seems to me, be precisely the same as if the firm had sent 100,000 sovereigns across the Atlantic.

"The questions, therefore, which occur to me are:— 'How far is this practice now carried?' 'How far is it capable of development?' 'What effect has it on the international movements of metal?' 'Does it not, so far as it goes, make it comparatively unimportant in what place the gold may be, provided the balance of accounts is such that the nation which wants it can get it if it pleases by making a moderate sacrifice?' Finally, 'Does it not largely dispense with the use of metallic money, even in international transactions?'

4. CORRESPONDENCE BETWEEN CREDIT AND THE METALLIC BASIS.

"You say, and I agree entirely, that in countries with highly developed credit money comes to possess great elasticity, whilst at the same time it maintains a correspondence or coherence with the metallic foundation on which the highly developed structure is raised. Now what is the character of this correspondence? It is not, I think, a quantitative relation in which so much more credit requires so much more gold, or, *vice versa*, so much more gold creates so much more credit.

It is, I think, a much more subtle and varying relation: varying chronically with the development of credit and business; varying locally with the habits of different nations; and, which is of very great importance, varying also temporarily according to the state of business, the increase or diminution of production, and the hopes or apprehensions of men concerning the success or failure of their undertakings. In short, this 'credit money,' though ballasted and kept safe by a liability to pay in gold, is an elastic medium which is not measured or limited by the stock or supply of gold, but which adapts itself to the ever varying needs and conditions of men.

"If you ever have time to say whether you agree you will add to the obligation I am already under to you. Believe me, sincerely yours,

"(Signed) T. H. FARRER."

"Professor Erwin Nasse,
"Bonn.

TRANSLATION OF LETTER FROM PROFESSOR ERWIN NASSE TO SIR T. H. FARRER.

"BONN, *8th July*, 1889.

"DEAR SIR,—From your welcome letter of the 22nd June, for which I am much obliged, I see that our views really diverge only in one point, viz., in relation to the use of gold for the regulation of international balances of payments.

"You are certainly right when you say that even in this function gold is more and more replaced by operations of credit. Transfers of capital are made instead of bullion payments. But, it seems to me, this does not diminish the importance of international

bullion payments or gold transfers as the regulator of the mass of credit money and of the state of prices in highly civilised countries. It is only the casual and passing drain of gold which can be prevented by the use of the means you speak of. But an excessive increase of credit money and consequent excessive rise of prices of all goods and services in any country must lead to a lasting drain of gold from that country to other countries. A lasting drain of gold could not be permanently stopped by transfers of capital on the part of the banks, by sending paper instruments, and so forth. Many countries would be unable to carry on such an export of capital for even a short time; none could do it permanently. This distinction between a drain of gold which is the consequence of a too high level of prices in any country, and which consequently can only be stopped by a lowering of prices, and a drain of gold which arises from a temporary cause such as bad harvests or foreign investments, and which comes to an end of itself with the cause, was, if I am not mistaken, often made by Lord Overstone. Lord Overstone was, in my judgment, right when he pressed for a contraction of the currency in order to stop the former drain, *i.e.*, the drain rising from a too high level of prices; but he was wrong in looking for this contraction only in a diminution of the note circulation, and he overlooked the much greater importance of cheques, Bills of Exchange, transfers in the Books of Banks, and accounts. He desired further, as it seems to me, erroneously, that the drains of gold arising from other passing causes should also be stopped by contraction of the currency. Disturbances in the balance of international payments arising from such casual and passing causes are becoming of less and less importance. But considering the ease with

which credit money can now be increased and general purchasing power raised in any country, it becomes a fact of more and more importance that an excessive increase of credit money and unsound raising of prices leads to the disturbance of the balance of international payments; and that the drain of bullion from the banks necessitates restrictions of credit, which put an end to the whole unhealthy development. I do not know how it would otherwise ever come to an end. In internal trade I see no reason why the general price level should not be raised or depressed at will by the development of credit.

"(Signed) ERWIN NASSE."

LETTER FROM SIR T. H. FARRER TO PROFESSOR ERWIN NASSE.

"ABINGER HALL, DORKING, *22nd July*, 1888.

"MY DEAR SIR,—I am much obliged by your letter of the 8th inst. It is clear that there is a point on which we do not entirely agree, and I should like, at the expense of further troubling you, to explain to you how this point strikes me.

"I am unable to follow fully either of your two distinctions, namely: First, the distinction you draw between those disturbances of international balances which arise from a general expansion of credit and an excessive rise of all prices, and those more casual disturbances which arise from temporary causes such as a bad harvest, or, let us say, speculations in a particular article; and Secondly, the distinction you draw between the operation of gold as a limit to credit in internal trade and its operation as a limit to credit in international trade.

"As regards the first of these distinctions, I cannot

remember any particular cases which embody and illustrate it. No doubt there are in different countries periods of sanguine speculation and periods of depression in which not one class only, but all, or almost all, classes of the community and of business are involved. But it seems to me, in the first place, that these tides of excitement and depression are, with the progress of international communication, becoming more and more universal and international, and less and less confined to a particular country ; and it is obvious that to whatever extent this is the case, they cannot be remedied by the flow of bullion from one country to another. In the second place, I am unable to draw any positive line between these ebbs and flows of general business, with their rise and fall of general prices, from the smaller ebbs and flows which are occurring constantly everywhere, in consequence of good or bad seasons, of new discoveries, of improvements in manufacture, of alterations in demand, of speculations in particular businesses, and all the different causes which are daily producing fluctuations in trade and change of prices. In both the one and the other class of cases, as it seems to me, the actual process and the remedy are essentially the same, and the relation of the two cases to the currency differs only in this, that in the former case the disturbance is spread over a wider, in the latter case over a narrower, area. In both cases action is followed by reaction, and inflation by collapse. Each speculation, as it seems to me, creates its own credit, and is stopped by the failure of that credit if the speculation turns out unfavourable or is carried too far.

"Then, as to your second distinction, namely, between the effect of gold upon internal trade and its effect upon international trade, I cannot think that

there is any such great difference between these two kinds of trade as has been often supposed. The trade between London and Hamburg or between Liverpool and New York is, so far as means and method of payment are concerned, as simple and as easy as the trade between London and Liverpool, between Hamburg and Dresden, or between New York and New Orleans. The use and development of credit is as great in the former case as in the latter, probably greater; and the use of gold as small in proportion to the amount of business done. Try it in another way: suppose two nations to become one; would that make any difference in their credit relations or in the mode in which they settled payments? It might perhaps have the effect of inducing them to adopt an identical coinage; but that would make no difference in their method of balancing and settling accounts. Or again, suppose some highly developed nation like the United States to succeed in carrying their protectionist principles so far as to isolate themselves from the rest of the world, so that there could be no demand for a foreign drain of gold; would that render their highly developed system of credit and currency unsound?

"Considerations such as these make me think that both in internal trade and in international trade the true principle of currency lies deeper than any quantitative relation between gold and purchases, and that we must seek for such a principle as will apply to both kinds of trade. I will try to put my idea of such a principle into words; though I do not find it easy to do so in a form satisfactory to myself.

"We are agreed that credit, or 'credit money,' as you so well name it, expands with the demand for it. I believe that it also contracts with the failure of the

demand. In other words, if the speculation was a sound one and has resulted in an amount of produce as great as was expected when the credit money on which it is based was issued, that produce itself satisfies, and perhaps more than satisfies, the credit or promise by the help of which the speculation was undertaken. If it does not result in the expected produce, there is nothing wherewith to satisfy the promise; and loss and insolvency are the result. Essentially it is not gold at all which satisfies credit, it is solvency, that is, the ability to produce as much as was believed or expected. It is in a due correspondence between the result of men's efforts and their beliefs or expectations, and not in the possession of an adequate supply of gold, that I find the real security for all sound credit, and for that form of credit which we term currency, as well as for other forms of credit. When a banker lends money to a farmer or manufacturer, he does not think of repayment in gold, but of the amount of produce which the farmer will get from his farm or the manufacturer from his factory, and the price at which such produce will sell. If that produce fully answers the expectations formed of it, the debt is repaid and the credit-money returns into itself without the use of gold. If it does not, the debt becomes bad; future advances are checked or stopped, and the credit-money ceases. What is true of these single transactions is true of all transactions, and of international as well as of internal or home transactions. It is the production of material results sufficient to enable the debtor to perform his promise which makes credit-money sound. It is the non-production of such results which makes it unsound; and such non-production is in itself a necessary check to credit. It is consequently, in my view, the material produce and the belief in or ex-

pectation of that produce which creates and which limits credit.

"'What part then,' you will ask, 'does gold play in these transactions?' My reply is 'A very important, but still a subordinate, one.'

"The gold coin is, first, the unit of measurement, and of course the purchasing power of all multiples of the unit must vary with the purchasing power of the unit. This function would remain if no gold at all were used as money, and if gold were actually used only for the arts. But secondly, gold has a further important function in our present mode of doing business. It affords the readiest means of applying a test of solvency. The liability to pay debts in gold involves, not the possession of gold, but the power of procuring it, and this power depends, as we have seen, first and principally on the material means in the possession of the debtor with which he can purchase gold: and secondly on the quantity of gold in the market and on its accessibility. This test, namely, the purchase and payment of gold, is useful because it is so simple; but it is, we must confess, attended by many inconveniences, and it is rarely, if ever, actually applied. Still, the liability exists and must be provided for. The banker is bound, if the customer who has deposited money with him requires gold, to return it to him in the form of gold; the debtor, to whom the banker advances credit-money, is bound, if the banker requires it, to repay him in gold. This gold need not be in the till of the banker; it need not be in the pocket of the creditor. It need not even be in the country of either, provided that there exist the means of procuring it. For the sake of convenience a certain quantity of it is kept in the reserves of the bankers of the different countries. But the quantity

so kept is conventional; it is a creature of local custom and of habit; and it has little or no relation to the quantity of credit which is said to be, and, in one sense is, based upon it. The increase or diminution of these reserves has no doubt some effect on the action of those who lend money, leading them to extend their issues when the gold reserves are increasing, and to contract them when the gold reserves are decreasing; and in this way the quantity of gold in the reserves operates on credit, and through credit on prices. But this operation appears to be somewhat fitful and uncertain, and its effect on prices is very indirect. Considering how rarely and exceptionally gold is actually used, and considering at the same time how regular and universal is the operation of what I have called the substantial solvency of the debtor, it seems to me that the effect of the supply of gold, and especially of the supply of gold in different places and countries, in limiting credit-money is altogether a subordinate one.

"Further, as regards this operation of the gold reserves, I can see no difference in principle between debts owing within a country and debts owing abroad. Last year, for instance, there was internal stringency within the United States because it was supposed that their gold was locked up in their Treasury, and that stringency was relieved when the United States Government took means to part with or to be able to part with their gold. This year we had a run on a penny bank in London, because the poor depositors erroneously believed that the Duke of Westminster, who was a patron and shareholder, had suffered losses on the turf; and it was stopped by showing them piles of gold and notes in the bank offices. These were cases happening within the respective countries

in which the state of the reserves of gold affected credit; and they seem to me to show that there may still be a demand for gold for internal as well as for external purposes, although from the more intimate business relations within the country, it would not be frequent. On the other hand, the development of credit in the form of bills of exchange has been quite as great in external as in internal trade; and that of banking promises now to follow suit.

"At the same time, whilst denying the paramount influence of gold, I fully admit that the state of the gold reserves of each country, their relations to the reserves of foreign countries, and the methods taken to maintain and replenish them, have a very material effect on business and on credit. But it seems to me that it is more near the truth to compare them to a barometer or a tide gauge, which shows in which direction pressure lies, and which points out in what countries gold or floating capital is for the time most required and best remunerated, than to look upon them as a reservoir of material money which is required for actual use in payment of debts.

"If, therefore, I am to give an answer to the third question in my former letter—viz., 'What limits credit?'—I should be disposed to say, 'The ability of the debtors to perform their promises; in other words, their solvency'; and this 'again depends primarily and principally upon the material value of their property, present or expected; and only secondarily and in a very subordinate degree upon the supply of gold.'

"Pray forgive me for thus dragging you into a friendly controversy. It was the interest I felt in your printed paper which induced me first to write to you; and it is the conviction arising out of our present inquiry that old currency theories require much

stretching, if not much alteration, to adapt them to present facts, which still induces me to place the suggestions that have occurred to me before one so able to criticise them.

"Believe me,
"Sincerely yours,
"(Signed) T. H. FARRER."

TRANSLATION OF LETTER FROM PROFESSOR ERWIN NASSE TO SIR T. H. FARRER.

"BONN, 30*th August*, 1888.

"MY DEAR SIR,—I have delayed answering your interesting and instructive letter of the 22nd of last month because I wished to consider your question carefully, and at the same time to send you the little paper which will in the meantime have reached you.[1] You will see that it contains the same view which you dispute in your last letter, and which I find myself obliged to modify for the reasons which you state, but not to give up altogether. The question between us, as it seems to me, is the following:—What is there to hinder an arbitrary rise of all prices, if gold is no longer used as money, and credit-money which can be easily increased is used in its place? Why do not we give two pounds where we now give one pound? We see periods of great and widely-spread rising prices which are ever extending from the centres of trade for a long time, as, for instance, 1856–57 or 1871–73. Why do not these periods last, and why do prices, after a short delay, sink again to something like their former condition?

[1] This paper is Professor Nasse's interesting article in the Jahrbüchern für National Ökonomie und Statistik, Bd. XVII., entitled "Das sinken der Warenpreise während der letzten 15 Jahre," to which I have referred above, page 62. It is published separately. Gustav Fischer, Jena, 1888.

"You say with much truth that the obligation of the debtors to fulfil their promises and their ability to pay limits credit, and that the obligation to pay in gold is a useful test of the debtor's ability to pay ; but we require a test, not only whether debtors are solvent, but also whether money prices of all things correspond to the universal value of gold. Extraordinary rises in prices do not by any means endanger the debtors' ability to pay, even if they have lost the right relation to the universal measure of value. In order that from this point of view the obligation to pay in gold should be a real limit, payment in gold must be actually required.

"The higher the development of credit and the perfection of a currency system is carried in any country or in any part of the world, the less often will an actual provision of gold be necessary for its internal trade. If, for instance, in England the Bank of England were enabled to issue one pound notes, and payment by cheques were at the same time further developed, the internal trade could scarcely ever require an increased quantity of gold coins ; but this is not the case with the whole world. 'Though paper documents will in highly civilised countries perform the maximum of expenditure, coin will long circulate in eastern and other less advanced countries,' says Stanley Jevons with much truth. I perhaps expressed myself inaccurately when I mentioned political boundaries as the actual boundaries in the international movements of the precious metals. Political boundaries are not without importance because the operations of each of the great central banks in Europe is confined to its country. The general circulation of their notes and their position as the bankers' banks are the chief causes which in countries such as England and Germany

allow the use of gold to be reduced to a minimum. But much more important than the political division is the thoroughly unequal state of development of payment by means of credit in different parts of the world. Throughout large regions of the earth exchanges can only increase in number and amount if at the same time there are increased means of payment in the form of metallic money. In these regions consequently no such arbitrary and universal rises of price take place as easily come to pass in industrial and commercial states by reason of the expansive power of the circulating medium. Each of these rises in price in one or more of the highly civilised nations causes a disturbance in the relation of imports and exports of goods and an export of money; and hence the crisis is always at last brought about by means of an accumulation of goods and an extraordinary deficiency of the stores of precious metals in the banks.

"If the whole world had, like England, a system of payment which rested entirely on credit, the danger of an unsteady course in the general movement of prices would, so far as I can judge, be quite enormous. The banks would scarcely ever be required to make actual payments in gold, and this test of their ability to pay would scarcely ever be called into operation. Every justifiable rise in price of particular kinds of goods would be exaggerated and extended in an unsound and unhealthy manner, only to break down if exposed to the accident of some external disturbance.

"I allow myself to make these few remarks for your consideration. A complete explanation of this difficult subject is scarcely possible in the form of a letter. In

the meantime I will not fail to express, with many thanks, how valuable I have found your letters.

"With much regard,
"Yours very truly,
"ERWIN NASSE."

NOTE ON THE FOREGOING CORRESPONDENCE.

I have purposely left the last word with Professor Nasse, and it is possibly the last word which can be said with advantage at the present moment. At the same time, it does not appear to me to be satisfactory, in a philosophical point of view, to admit that the currencies of the most advanced and civilised nations are sound and reasonable only so long as there are many nations which are in a more backward state; and that the credit system on which England and the United States, and to a lesser degree France and Germany, do their business, must break down and disappear if it is extended to South America, to Africa, and to the East. Nor does it seem to me necessary or even probable that catastrophes in price would arise, even if the whole world were to adopt a system of credit such as prevails in England. The liability to pay in gold, even though little or no gold were actually used either in internal or international exchanges, would be a stringent check on extravagant inflation of prices.

But it is perhaps impossible, certainly premature, to speculate with advantage on what will happen when all the world is as advanced in commercial civilisation as Europe and North America now are. New wants bring new devices, and the intense if unconscious acuteness of men of business, each acting in his own interest, develops a growing organic system which leaves con-

scious analysis behind, and puts to shame the *a priori* systems of the closet. If a vision of the present system of credit, of the present amount of business, and of the present amount of metallic money used in it could have been brought before the eyes of David Hume and his contemporaries, it would have struck them with astonishment, if not with alarm; and we in this generation may well be satisfied with an analysis of our actual condition without seeking for a theory which shall strictly apply to and fully explain the unknown possibility of the future. If there is anything to be learnt from the recent developments of Economical Science, it is that the newly discovered truth of one generation becomes, if treated as an absolute, complete, and universal dogma, a falsehood in the next; that no generalisations of the philosopher are final; and that the organic development of Labour, Trade, and Business is constantly requiring a corresponding extension of observation and philosophy.

> "In spite of your fine theoretic positions,
> Mankind is a science defies definitions,"

says Robert Burns; and what he says is true of business and even of currency, as well as of the more delicate and abstruse parts of human nature. The object of the foregoing pages will have been answered if it suggests to thinkers, writers, and teachers on the subject of currency that the "money" with which we commonly buy and sell is not Gold, and that the relation of Currency to Price is one that requires much more investigation and much more knowledge before we can presume to dogmatise about it.

T. H. FARRER.

August, 1889.

THE QUANTITATIVE THEORY

OF

MONEY AND PRICES

V.

THE QUANTITATIVE THEORY OF MONEY AND PRICES.

Written for the Gold Standard Defence Association, 1897.

1. Is it true that the rise and fall of prices depends on the quantity of money? And if true, in what sense is it true, and to what extent? The question assumes practical importance at the present time, because one of the complaints of the bimetallists is that prices have fallen in consequence of what they call the demonetisation of silver, and the consequent scarcity of money. Whether this allegation is well founded; whether all prices have fallen; whether a fall in the prices of necessaries is a bad or a good thing; whether a general rise in all prices would do good or harm; and whether it is desirable to try to raise prices by tampering with the currency, are questions on which, though differing entirely from the bimetallists, I do not propose now to say anything. *My object is to discuss the theoretical question, " What, if any, is the relation between the quantity of money and prices?"*

2. The *prima facie* view of the quantitative theory of money and prices is very simple. It may be stated in the following form: " Every sale or purchase

consists of an exchange of a certain quantity of a particular kind of goods for a certain amount of money, which amount of money is called price. Let the quantity of goods remain constant; then, if the amount of money available for the exchange also remains constant, prices will remain unchanged; if it increases, prices will rise; if it decreases, prices will fall. What is true of a single sale or purchase is true of two or more sales or purchases; and what is true of two or more sales or purchases is true of all sales and purchases. If, therefore, we could at any given moment know the quantity of goods which are being sold or purchased, and the amount of money for which they are exchanged, we might conclude that, so long as the quantity of goods remains the same, any increase in the amount of available money would raise prices, and any decrease in the amount of available money would lower prices." The formula thus stated is logically correct; but, *dolus latet in generalibus.*

3. We must know the exact significance of the terms we use, and their application to the existing circumstances of the market, before we can derive any useful information from the above formula. In that formula we have used the word money, and "money" is a word which has several different meanings. Indeed, it is to the ambiguous use of the word "money" that many of the errors and confusions of thought, so prevalent in currency discussions, have arisen. In the present controversy arguments for a great practical change in the relations between gold and silver are constantly based on the quantitative theory expressed in the above formula, and it will be found that those who use such arguments make a serious misuse or misapplication of the word "money" by treating it as if it meant gold or silver coin. We shall

see presently what a confusion there is here, and what dangerous consequences flow from it.

4. For our purpose the most important distinction between the different meanings of the word "money" is the distinction between "money" signifying the coin which constitutes the "standard of value" and "money" signifying the "media or means of exchange." The money which is the standard of value is always one of the "means of exchange," but it is only one of many means of exchange. The distinction is of the highest importance, and it is one which, with the progress of modern business, becomes more and more important every day, because every day sees a greater and greater use of "means of exchange" which are not in any sense standards of value. *Coins of the standard precious metal or metals, which formerly constituted a very large proportion of the "means of exchange," now constitute among us a very small proportion of them.*

5. Let us first consider "money" as the "standard of value." Taken in this sense, it is used to signify the coins or pieces of precious metal which we have agreed to adopt as our measure or unit of value—in other words, gold sovereigns. It is to the quantity of standard gold contained in a sovereign that we refer in determining the values of all other things. It is the number of gold sovereigns for which things will exchange which constitutes their price; which settles the terms of every bargain, and which enables us to compare the value of one thing with that of another. The gold sovereign itself is only a piece of gold of a given weight and fineness, stamped with the Queen's head in order to show that its weight and fineness have been officially tested. The quantity of sovereigns in actual use depends solely on the demand

for them, since any one can take gold to the mint and have it turned into sovereigns. Under these circumstances the value of the sovereign is simply the market value of the gold which is contained in it.

6. But gold itself varies in value. If the aggregate demand of the world for gold increases in a greater proportion than the supply of gold in the world, the value of the gold sovereign increases, and gold prices fall. If the supply of gold in the world increases in a greater proportion than the demand, the value of the gold sovereign decreases, and prices rise. To this extent, therefore, the available quantity of gold in the world or, in other words, the supply of gold, does, by affecting the value of the standard unit of value, influence all gold prices. But this is a very different proposition from that with which we started, and does not bear out the proposition that prices depend on the quantity of money. It should rather be stated as follows :—

The market value of the gold contained in a sovereign depends on the market value of gold; that value depends on the supply (or, in other words, the available quantity) of gold, and the demand for gold. Quantity of gold does therefore affect the standard or unit of value, and in that way affects all prices.

7. But in considering the question whether at any given time variations in the quantity of gold have or have not affected prices, we have to deal with a complicated set of facts, many of which are very difficult to ascertain. We have to determine what are the relations between the whole supply of gold in the world, including all accumulated stocks, whether of gold coin or gold bullion, or gold articles of any kind, and including also the production of gold for the time being on the one hand, and the demands for gold, whether for purposes of current coin or of reserves, or of hoarding, or of the

Arts, on the other. It is scarcely possible to arrive at an exhaustive and exact solution of this problem. *But it is for those who allege that demand has exceeded supply, and that consequently the value of the gold in a sovereign has risen and has caused a fall of prices, to prove their case upon these data, aud this they certainly have not done.* On the contrary, considering that stocks of gold accumulate ; that the annual production of gold is increasing enormously; that the demands upon gold caused by the so-called demonetisation of silver were, at the commencement of the Bimetallic agitation trifling compared with the stocks of gold, and are still far from sufficient to exhaust the supply ; and above all, as we shall see below, that banking facilities and changes in habits are constantly reducing the proportion of gold money needed for carrying on business, and the consequent demand for gold used as a medium of exchange, the strong probability seems to be that, considered as a whole, the supply of gold in the world has increased, or is increasing, faster than the demand. Consequently there is not at the present moment any reason to suppose that the quantity of gold contained in a sovereign has increased, or is increasing, in exchange value, much less to conclude that it is a deficiency in the supply of the metal of our standard coin which is responsible for the fall of prices which has taken place in certain articles of general consumption.

8. This does not profess to be a statistical paper, and I do not propose to deal with the figures here. Those who wish for further and more detailed information may be referred to Soetbeer's *Materialien* ; to the Report of the Gold and Silver Commission ; to the evidence given to the Agricultural Commission ; to the Annual Reports of the Director of the United States

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Mint; to the Leaflet, No. 23 in this series of the Gold Standard Defence Association by M. Ottomar Haupt, entitled "Is Gold Scarce?" and to the tables of the production of gold and silver, given in the *Statist* of 25th September and 2nd October, 1897, and in the *Economist* of 5th February, 1898.

9. We have been hitherto considering "money" in the sense of the "standard of value." But, as we have seen, the word "money" also signifies "means or media of exchange"; and it is in this sense that the word "money" is used in the formula I have placed at the beginning of this leaflet. Used in this sense "money" does not mean simply gold sovereigns. It is not true that every sale and purchase is effected by the use of gold sovereigns. On the contrary, it is notorious that out of the whole number of wholesale transactions, those in which gold sovereigns are used as a means of exchange are so few and small as scarcely to deserve notice. It is also notorious that in retail transactions the use of gold is already much restricted, and is daily becoming smaller and smaller. It is by different forms of credit that our dealings are actually carried on. Whilst the gold sovereign is the unit or measure of value in terms of which contracts are made, *the real medium of exchange is, not gold sovereigns, but a promise to pay gold sovereigns; a promise the actual performance of which is seldom exacted unless in the case of panic.*

10. Money in the sense of "means of exchange"—the "money" of the quantitative formula given above; the "money" of the market; the "money" of the Press; the "money" of common speech and conversation, consists, not wholly or principally of coin, but of bank notes, of cheques, of bills, of bank credits, and of all the different forms of orders to pay and promises to pay by which in practice men settle their

dealings with one another. It has been estimated that in 98 per cent. of the commercial transactions of this country credit in one form or another is the only medium of exchange. Let any one, whether in business or not, consider his own practice. In how many cases of ordinary retail transactions does he make a payment with gold, or even with notes? How many debts has he which he does not pay by cheques? The banking deposits of the country have been estimated at nearly £800,000,000, whilst the whole gold coin of the country, including what is called waistcoat pocket money, has been roughly estimated at £100,000,000. The amount of settlements effected through public clearing houses in which neither coins nor notes are used is enormous. In the London clearing house alone payments were made in 1896 to the extent of £7,575,000,000, the average for the ten years 1868-77 having been only £4,941,000,000. Gold sovereigns are now scarcely used except in payments across the counters of retail shops, in refreshment houses, in travelling fares, and perhaps above all in payment of daily and weekly wages. *Indeed, it is one of the ironies of the situation that whilst the recent fall in prices is attributed by bimetallists to scarcity of gold, the cases on which they rely as proving a general fall of prices, viz., the cases of wholesale prices of goods collected by Mr. Sauerbeck and others, are cases in which gold is seldom or never used as a means of payment, whilst in the principal case in which gold is used—viz., in payment of the wages of labour—prices have risen.*

11. Gold coins, whilst remaining our sole "standard of value," have long ceased to be our ordinary "medium of exchange." To say that gold has been economised is a very inadequate statement of the fact. Gold has been supplanted and replaced by other forms

of currency, infinitely more economical, because in themselves they cost little or nothing; infinitely more safe, because they cannot be stolen; infinitely more convenient, because they expand and contract automatically with the need for them.

12. In short, it is the whole mass of credit currency, and not the number of gold sovereigns in use, which constitutes the great factor in price, and which gives its tone and real meaning to the word "money" in the quantitative formula set out above.

13. I have said that these media of exchange expand and contract with the demand for them. This is a most important consideration, in view of the quantitative theory of prices, because it shows that so long as business is in a healthy condition and there is no panic, there cannot possibly be any deficiency of means of exchange in the transactions which are carried on by these media, or any lowering of price in consequence of such deficiency. As sound business increases—business, that is, which does not over-estimate production or consumption—credit increases with it, and with credit, bills, bankers' credits, cheques, and other forms of promises to pay, which form our real media of exchange.

14. As business increases credit money increases, and if the effect of increasing business is to raise prices, and thus to require an additional quantity of media of exchange, credit increases in proportion, and the additional media are at once forthcoming. Thus the quantity of money in use at any given time depends on business, and not business on money. It is business which creates money, and not money which creates business.

It is only in those dealings in which coin is still used

that a scarcity of coin can restrict business or lower prices, and how few and small these are we have seen above.

16. But it may be asked, "Upon what is all this credit money based? If it consists of promises to pay gold, how are those promises secured? Must not there be somewhere a reserve of gold out of which to pay them if required? Must not this reserve increase with the business founded on it? And must not the mass of credit money founded on it be proportioned to the amount of the gold reserve?" The answer to this is that so long as business is properly and safely conducted, the promises to pay will never be presented for payment in gold. They will be set off against one another. It is only when expectations have been falsified that men are asked to pay in gold. To provide against such falsifications—which, of course, cannot be avoided altogether—there must be some security, and this is found in an ultimate liability to make payment in gold. To meet such liability, and also to provide for the payment of international balances—which, however, are now constantly settled in other ways—sufficient stocks or reserves of gold are no doubt required, and are, or ought to be, kept by the banks. It is the all-important business of bankers to know what stocks are necessary for this purpose, and it is their duty to keep whatever may be necessary. What this amount should be in each case is a matter of opinion and of habit. But it may be safely stated that it bears no definite proportion whatever to the business of which it is the basis and the ultimate security. If there is any element in business to which it really bears a proportion, that element is only the ultimate liability to pay in gold which is so seldom enforced; in other words, the apprehension of men that con-

tracts may not be performed, that expectations may be falsified, and that the material products of industrial undertakings may be less than is anticipated. If all promises to pay were presented for payment, no possible amount of gold would avert insolvency, and uncertainty on this point is the cause of every panic. On the other hand, when there is no alarm, any addition to the gold reserve beyond the amount to which habit and sound practice has shown to be necessary is superfluous, and remains idle in the banks. So far as reserves are concerned, there is no unlimited demand for gold, a fact which has been sufficiently obvious in recent years.

17. No doubt there are circumstances in which the subtraction from or addition to the reserves of a substantial quantity of gold might diminish or increase credit, and thus lower or raise prices. If, for instance, in a state of incipient panic or strain, when men were beginning to be alarmed and were inclined to present promises for payment in gold, a large amount of gold were withdrawn from the banks, it would aggravate the strain, contract credit, and lower prices. But there is no evidence whatever that any such thing has happened. On the contrary, the rate of discount, which is the barometer of the state of credit, has been lower, and the reserves of the banks have been greater since the so-called demonetisation of silver than they were before. Again, if, at such a time of strain a large amount of gold were suddenly added to the stores of the banks, it might create confidence in their ability to pay, might prevent a run on the banks, and might thus raise or maintain prices. But if the same amount of gold were added to the reserves of the banks at a period when there was no such strain, it would probably have very little or no effect ; it would certainly not

alter prices more than an addition of the same amount of credit money would have altered them. In such a case the effect of this addition of gold, considered as a constituent of price, would be proportioned, not to the increase in the amount of the gold reserve, but to the increase in the whole amount of money, whether metallic money or credit money, in existence for the time being, and its effects on prices therefore would be infinitesimal. *This is probably what has happened during the recent years in which the supply of gold money from the mines and in the banks has largely increased, without any apparent effect in raising prices.*

18. Let me guard against a possible misconception. I do not say that gold discoveries do not increase business and raise prices. I do not say that men bringing home quantities of gold, or, which is the same thing, large profits made out of gold mining, may not spend their gains in such a way as to expand trade, raise wages, and increase circulation. Still less do I deny that the demand for necessaries to supply the wants of highly-paid gold-miners creates a demand for manufactured goods and for agricultural products which is satisfied by the gold they produce, and which has immense and far-reaching effects on the development both of the countries in which the mining takes place, and of other countries. All this is true of the fresh production of gold, just as it is true of the fresh production of wheat or iron or any other useful commodity. My present argument is confined to showing that the addition of a fresh quantity of gold to the reserves of gold on which our vast mass of credit money is based, is simply an addition of so many pounds sterling to the whole mass of money in existence, whether metallic money or credit money; and is consequently comparatively insignificant as a factor in prices.

19. It will be obvious how important a bearing this view of credit money as a medium of exchange has upon the value of the gold standard coin considered as a standard of value. That value, as we have seen, depends on the relation between the aggregate supply of gold in the world and the aggregate demand for gold in the world. Although the aggregate demand for gold in the world is a different thing from the demand for gold as a means of exchange in civilised countries like Great Britain, yet the two are intimately connected. If it is true that in such countries the use of gold coin as a medium of exchange is constantly more and more dispensed with, and that it is replaced by a credit currency which expands and contracts with the demand for it, *we may put aside any notion that the demand for gold as a means of exchange increases in proportion to the increase of population and business, and any apprehension that growing trade is likely to be crippled and stunted for the want of gold coin to be used as a means of exchange.* More than this. Taking the above view of the use of credit money, and coupling with it the great recent increase in the supply of gold, we may regard with perfect equanimity the accession of one civilised country after another to the gold standard, and may devote our attention to the development of banking facilities throughout the world, and to the gradual acquisition by all civilised nations of one single standard of value, with its settled par of exchange. Such a consummation, however distant, is well worth fighting for.

20. Let us now sum up. In asking the question whether prices depend on the quantity of money, we must first determine what we mean by "money." Money may mean the gold coin or sovereign, which is our standard of value; and the unit of which all

prices are multiples. The value in exchange of the sovereign is the value of the gold which it contains; the value of gold depends, as in all other cases, on demand and supply; and since quantity is the most important element in supply, the quantity of gold in existence affects the value of the sovereign, and through the sovereign affects prices. But it is the quantity of available gold in existence, not the quantity of coined money, which has this effect; and the question of the moment is whether the whole quantity—in other words, the supply of gold—has increased or diminished when compared with the demand. The answer to this question is that there is much more reason for thinking that it has increased than for thinking that it has diminished. *Prices have not fallen in consequence of any diminution in the supply of gold.*

21. "Money," again, may mean, and in general language does mean, the "media" or "means of exchange"; and in this sense it includes gold sovereigns, coined silver and copper money, bank notes, cheques, bills, bank credits, and all the different forms of credit and promises to pay by means of which payments are effected. To the quantity of these means of exchange, taken as a whole, prices no doubt bear some fixed relation. But these means of exchange or credit money are indefinitely greater in amount than the gold coin; they bear no definite proportion to the gold coin; they expand and contract according to the demands of business, and do not, unless in the special and exceptional cases above referred to, depend on the supply or quantity of gold coin. An addition of gold coin to the currency, consequently, has not, unless in these exceptional cases, any effect on prices beyond that which the addition of a similar quantity of "credit" money

would have, and is, therefore, in general, considering the small proportion it bears to the mass of credit money, infinitesimally small—in fact, a negligible quantity.

22. *How do these conclusions affect the Bimetallist proposal?* That proposal is, by opening our mints to the free coinage of silver, in addition to gold, to add silver to gold and thus increase the quantity of metallic money, whilst at the same time attempting the task of making both metals circulate at a given ratio. Will this addition to the quantity of money in the world, suppose it could be made, raise prices?

First:—What will be the effect on the standard of value? It will add largely to the quantity of the metal available for mintage into the standard coins, and to this extent, supposing the sovereign still to exist as the standard coin, and to consist for the future either of its present weight in gold or of fifteen and a half times its weight in silver, it ought to reduce the value in exchange of the sovereign and to alter all contracts and all arrangements made in sovereigns and all gold pieces. To what extent it would have this effect, and whether any such effect would be just and honest, are questions I do not enter upon here.

23. Secondly:—What would be the effect of the bimetallist proposal on "money," considered as including all the different media of exchange? The first answer is that, in point of quantity, the addition of the new coined silver money, to the whole mass of money, metallic or otherwise, would be so small as to make no perceptible difference in prices. But there might very well be an effect of another kind which would enormously diminish the quantity of credit money in existence, and thus diminish prices far more than any diminution of value of the standard

coin would increase them. If men of business were to apprehend that they were to be paid in silver at an artificial value instead of in gold; if they should, under such apprehensions, determine to make all their contracts in gold, to the exclusion of legal tender silver; or if, at the present or at any future time, they should apprehend that the artificial ratio between gold and silver could not be maintained, the result might very well be a run on gold, a commercial panic, and a contraction of credit money, which would cause such a collapse of prices as we have never seen. and which would far more than counterbalance any increase of prices due to the proposed diminution in value of the standard coin.

24. But these are matters of speculation on which I do not wish to dogmatise. *My object is to show that the relation between the quantity of money and prices is a very complex one, and depends on the meaning we give to "money"; that any alteration in money considered as the standard of value is a very serious matter, and not to be undertaken on the evidence before us; and, finally, that there is no ground whatever for any apprehension of deficiency in "money" considered as a means of exchange, and no reason for attempting to add silver to gold as a means of remedying such supposed deficiency.*

BIMETALLISM

AND THE

FOREIGN EXCHANGES

Written for the Gold Standard Defence Association, 1897–98, *but not yet published.*

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VI

BIMETALLISM AND THE FOREIGN EXCHANGES

Written for the Gold Standard Defence Association, 1897.

THERE ARE REAL EVILS IN AN UNSTABLE EXCHANGE.

1. On many points the supporters of a gold Monometallic standard are directly opposed to the Bimetallists. As regards the alleged scarcity of gold; the supposed effect of such scarcity on prices; the evil effects attributed to present prices; the necessity for supplementing gold by silver; the possibility of establishing a fixed ratio between gold and silver; the expediency of joining in an international conference for the purpose of wrangling out such a ratio; above all, as regards the notion so prevalent in Bimetallic literature, of trying to make men prosperous by increasing the nominal amount of the counters in which they reckon, gold Monometallists meet Bimetallist propositions by asserting and, as they believe, proving a simple negative.

2. But where there is much smoke there is generally some fire, and nothing can be gained for the right cause

by denying the one element of truth which lies at the bottom of the Bimetallic agitation, viz., that real mischiefs and inconveniences have arisen from the recent fall in the gold value of silver. To deny this is no part of honest controversy, especially for one who has served, as I have done, both on the Gold and Silver Commission and on Lord Herschell's Indian Committee. If gold Monometallism is to be defended, it must be by facing, not by ignoring, facts ; and I therefore propose in this paper to consider what are the real mischiefs and inconveniences which business has sustained by the fall in the gold value of silver.

3. When the Bimetallic case is examined the arguments by which it is supported will be found to fall under two heads. First, arguments founded on the evils supposed to arise from the alleged scarcity of gold, and the supposed effect of this scarcity on prices ; and, secondly, arguments founded on the evils arising from a fluctuating exchange.

4. As regards the first head—viz., the alleged scarcity of gold and its supposed effect on prices—the Bimetallic attack has recently lost heart and flagged, in face of the large actual and prospective additions to the stock of gold in the world and of the accumulations held by the banks—additions and accumulations which were thought improbable or impossible when the Bimetallic agitation began.

5. The Bimetallic case now rests principally, if not exclusively, on the evils supposed to arise from fluctuations of exchange between countries which have a gold standard and countries which have a silver standard ; and it is these evils, real or supposed, which I propose to examine in the present paper.

6. It will be observed that I speak of a fall in

silver. The diminution which has taken place in the gold price of silver may of course, theoretically, be due either to causes affecting silver or to causes affecting gold. For the reasons stated in the second part of the Report of the Commission appointed to inquire into the causes of the changes in the values of the precious metals,[1] reasons which have been much strengthened since that Commission reported, I have, in the following observations, assumed throughout that the change is due to causes affecting silver, and have argued the question of exchange on that assumption. Most of my arguments would, however, *mutatis mutandis*, apply equally if the fall in the gold price of silver were due to causes affecting gold.

7. A diagram[2] is appended showing the relation in values of gold to silver from 1500 to the present time. From this diagram it will be seen that the recent fluctuations in the relative value of gold and silver have been greater than they have ever been, and much greater than they have been since the first half of the 17th century; and that in the later as well as in the earlier time the fluctuations have, on the whole, consisted in a fall in the gold value of silver. It will also be seen from this diagram that the greatest falls in the gold value of silver since the great falls in the 16th and 17th centuries took place after 1873, when the French and German mints had been closed to silver, and after 1893, when the Indian mints were closed, and when the purchases of silver in the United States under the Sherman Act were discontinued. It would be idle to deny that these measures had an

[1] See *Report of Gold and Silver Commission*, Part II., paras. 48 to 71.

[2] This table, down to 1886, is taken from Soetbeer's *Materialen*, and has been continued to 1894.

influence in causing a fall in the market value of silver. On the other hand, it is equally clear, from a glance at the diagram, that the recent fall in silver began before the alleged demonetisation of silver; and also that it is absolutely false to represent that the market values of the metals maintained an unbroken relation to one another during the period when a Bimetallic law existed in France and other countries. There were constant fluctuations, and some of them, *e.g.*, those at the beginning of the 17th century, were very great indeed.

8. The mischiefs attributed to these fluctuations are many, and some of them, at any rate, are admitted by all reasonable Monometallists. It is the object of this paper to enumerate these mischiefs, to ascertain how far they really exist, and to distinguish between so much of them as can be proved and the exaggerations by which Bimetallists have magnified and distorted them.

FLUCTUATIONS OF EXCHANGE—HOW THEY DIFFER.

9. Before enumerating these mischiefs, and tracing their true character and effects, it is desirable to call attention to certain distinctions which should be kept constantly in mind.

10. In the first place it is necessary to distinguish between the effect on contracts of a falling and of a fallen exchange—in other words, between the effect of a fluctuation which takes place after the inception and before the conclusion of a contract, and a fluctuation which has run its course before the inception of the contract. It is clear that a fall in exchange which takes place between the inception and the completion of a contract, and which alters the meaning of the terms in which the contract is made, presents far

greater difficulties to the trader than a fall which has taken place before the inception of a contract and which has left the relation of the pound sterling to the silver rupee (or the silver dollar) a matter of no doubt. If an English cotton merchant, when he contracts to sell cotton in India, does not know how many pounds sterling a given number of rupees will bring him, or if an Indian wheat exporter who is selling wheat in London does not know how many rupees he will get for the pound sterling for which he sells his wheat, he is obviously under a difficulty which does not exist where the rupee, though fallen from its former value, has attained, for the moment, a position of stability.

11. A second distinction which it is important to bear in mind is the distinction between a past fall or fluctuation in the exchange betweeen two countries, which, though complete as respects the dealings between the two countries, has not yet been completely adjusted so far as regards its effect upon the internal dealings and currencies of the two countries ; and one in which such adjustment has been completed. The silver rupee may have fallen in its gold price so completely that the fall is fully recognised and accounted for in every mercantile transaction between England and India, and yet at the same time rupee prices in India may not have completely adjusted themselves to the new value of the rupee.

12. A third distinction which is of the greatest importance, but which is constantly overlooked, is the difference between what the old economists call the *real* as distinguished from what they call the *nominal* exchange.[1] It is the A B C of business,

[1] See, for an excellent account of Real and Nominal Exchange, Blake on Exchange, reproduced in Lord Overstone's *Tracts on Paper Currency*, 1857.

that when of two countries one has, in consequence of good or bad harvests in one or the other country, or of heavy borrowings, or of any other of the great factors which influence the course of trade, incurred a balance of liability to the other, there is a demand for remittances to discharge that liability, which gives the exporting merchants of the debtor country a temporary premium until the balance is redressed or reversed. This happens whatever may be the currencies of the two countries. It is no advantage to the debtor country as a whole, rather the reverse. Indeed, it is a mere incident of the ordinary discharge of debt. If the two countries have the same standard of value or, in other words, have the same metal as the material of the standard coin of their respective currencies, and if they are both solvent, the alteration in exchange or, in other terms, in the rate at which the two currencies will exchange for each other, can never go beyond the certain and comparatively narrow limits of what is called the specie or bullion point—in other words, the point at which it is cheaper to send bullion than to pay the premium on bills; since, when that point is reached, it is less disadvantageous to the merchants of the debtor country to remit coin or bullion than to pay the premium. If, for instance, the course of trade between London and New York becomes such as to bring New York on the balance into debt to London, a larger number of United States gold dollars will have to be paid for English gold sovereigns. The dollar gets a smaller and the sovereign a larger relative value. But this variation cannot exceed the cost of remitting gold, since it is cheaper for the New York merchant to send gold to London than to pay a heavy premium in dollars for sterling bills on London. This is what has

been called the *real* exchange, becauses it arises from the facts of trade. But in the case where the standard of value of the two countries differs—*e.g.*, where the standard of the one is gold and the standard of the other is silver or paper—the case is very different. In this case, the exchange—or, in other words, the value of the currency of the one nation in terms of the currency of the other, or, as it has been called, the *computed exchange*—will depend, not only upon the relative indebtedness of the two nations, but also on the market value of their respective standards of value—*e.g.*, on the market value of silver measured in gold, of paper money measured in gold, or of paper money measured in silver. This latter cause of variation is, as is obvious, not due to any alteration in the relative liabilities of the two countries, but to an alteration in the relation to each other of the two standards by which they respectively measure values. It has been, therefore, properly termed *nominal* as distinguished from *real* exchange. Where this cause or variation exists, there is no such limit to the rise or fall in exchange as there is where countries possess the same metallic standard of value; and it becomes difficult, and in some cases impossible, to say with certainty how much of any given rise or fall is due to *real* and how much to *nominal* exchange. It is, however, most important to bear in mind the fact that, though we may not be able to trace its effects on the actual or *computed exchange*, such difference does really exist.

13. Many doubts and confusions arise in the case of varying standards of value, which do not exist where there is one standard.

For instance, when the standard is the same—*e.g.*, gold—in two countries, their immediate relative

liabilities are made distinctly perceptible by the alterations in exchange, and ultimately by the flow of gold from one country to the other. Where the standards differ this is not the case.

Again, much false argument which is used in these controversies arises from attributing to alterations in *nominal* exchange—*i.e.*, to alterations which are only due to changes in standards or, in other words, in weights and measures—functions and meanings which are only true when predicated of *real* exchange: *i.e.*, of alterations of exchange caused by alterations in the relative liabilities of the two countries. Persons who make this mistake foolishly conclude that by some alterations of currencies they can alter the real commercial relations of the two countries, whereas the fact is that those relations would remain the same whatever the respective currencies might be. It is one of the evils of dual or manifold standards that they give rise to this confusion—a confusion which is especially dangerous in dealing with questions of price. Prices, of course, adapt themselves to standards of value, and vary as those standards vary. If paper falls in Argentina, paper prices rise, and the paper premium on gold rises without any alteration whatever in the real commercial relations between Argentina and her customers. But this elementary truth is constantly overlooked—and a nominal rise in price is confounded with a real rise in value, and *vice versa*. If wheat becomes cheaper in the United States by reason of improvements in transport and production, the gold price is lowered equally in gold dollars and in gold sovereigns, and no one thinks of attributing the lowered price to alterations in exchange. If the same thing happens in India or any other country where silver is the standard, and where the silver rupee has

fallen, the lowered value of the wheat is concealed by the increased number of rupees which have to be given in order to procure the same gold price for it; and people who do not look carefully into the matter attribute the fall in the gold price of wheat, which really arises from improvements in transport, to the change in the relation between the sovereign and the rupee, and they think that by altering the relations between the sovereign and the rupee they can raise the gold value of wheat and relieve the English farmer from the effects of foreign competition.

14. Precisely the same thing happens where the standard currency of one country is gold and that of the other is depreciated paper. Some persons, indeed, have denied the analogy between silver prices and paper prices; because, they say, paper is at a discount in countries with depreciated paper, and silver is not at a discount in silver countries. But this difference does not affect the exchange relations with gold countries. In speaking of Argentine exchange we never consider the silver dollar at all; we simply consider the relation of the Argentine paper dollar to the £ sterling, just as we consider the relation of the rupee to the £ sterling. If, instead of depreciated paper, Argentina possessed a metallic currency, and that currency was depreciated by debasement, the effect on Sterling Exchange would be the same as that of the depreciated paper. Nor would it make any difference to Sterling Exchange with India if the rupee bore as its face value the words one-tenth of a sovereign. There are, of course, differences between paper depreciated in terms of silver or of gold and silver depreciated in terms of gold. Silver is an article of value; it costs money and labour to procure it; it can be imported or exported; and it cannot be said

to be at a discount; none of which things are true of paper. But this does not affect the question of exchange, which depends on the relation of value between the depreciated currency and the £ sterling, not on the nature of the depreciated currency.

15. It is difficult to exaggerate the confusion of thought and the consequent errors which have arisen from inability to distinguish *real* from *nominal* exchange. And this inability is unavoidable wherever there is not a fixed par of exchange—in other words, wherever there is not a common measure of value between two countries.

ENUMERATION OF MISCHIEFS ARISING FROM FLUCTUATION IN THE GOLD PRICE OF SILVER.

16. Having made these preliminary observations, let us now consider what are the evils which are alleged to have arisen from the falling and fallen gold price of silver; or, in other words, from the fall in exchange between gold- and silver-using countries. In doing so we ought properly to eliminate from the actual or *computed* exchange the fluctuations in the *real* exchange, since those must always happen, whatever the currencies. It is, however, as above stated, difficult, if not impossible, to do this with any accuracy in the case of countries which have not the same standard of value; and since the actual or *computed* exchange cannot be thus analysed, the *nominal* exchange is often made to bear the blame of fluctuations due to causes which have in reality nothing to do with currencies, but which would happen whatever the currencies might be.

17. The various mischiefs attributed to fluctuations

of exchange arising from the fall in silver may be enumerated as follows, viz. :—

(1) The break of gauge between gold and silver countries, or, in other words, the interruption and inconvenience to trade between gold and silver countries caused by the fall in silver.

(2) The alleged premium or bounty said to be given to producers in silver-using countries by the fall in silver.

(3) The difficulty which silver-using countries find in paying their gold debts in consequence of the fall in silver.

(4) The impediments caused by the fall in silver to gold investments in silver-using countries.

To these four evils, which have been often discussed, I should be disposed to add two more, viz. :—

(5) The means and opportunities afforded by the fluctuations in nominal exchange for speculation, and, in some cases, for jobbery, carried on, like the business of the money-changers in old times, at the expense of real trade.

(6) The confusion of thought which arises from attributing to the *nominal* exchange, *i.e.* to alterations in currencies, effects which are really due to the causes which alter *real* exchange, *i.e.* changes in the commercial relations of the two countries.

18. It is to be observed that, supposing these alleged evils to be all true, some of them must have a tendency to neutralise others. If, for instance, it is true that the fall in silver tends to prevent investments in silver countries, and that silver countries have to make special efforts to discharge their debts, these circumstances must operate as a check on production in silver-using countries, and must, to whatever extent

they prevail, counteract the supposed operation of the alleged premium on production in silver-using countries which is attributed to depreciation of their currency. And again, if fluctuations in exchange encourage trade between silver-using countries at the cost of their trade with gold countries, the same cause must encourage trade between gold-using countries at the cost of their trade with silver-using countries.

BREAK OF GAUGE BETWEEN GOLD AND SILVER COUNTRIES, AND CONSEQUENT INTERRUPTION OF TRADE.

19. Let us now consider these alleged evils more closely. The first alleged mischief is that the break of gauge between gold and silver causes much inconvenience and some loss in carrying on trade between countries with a gold standard and countries with a silver standard. That this is true to some extent there can be no doubt. If a merchant in London has to sell English produce in Calcutta, or a merchant in India has to sell Indian produce in London, he has, besides considering what will be the price at the place of sale, to consider at what rate that price will be turned into gold in London, or into silver at Calcutta. This is an additional element of uncertainty and risk. If a rise or fall in exchange takes place pending the operation, it may disappoint the expectations of the merchant in various ways. It may give him a smaller profit than he anticipated, it may cause difficulties in the performance of his contract, or it may cause competition which he never anticipated. To a considerable extent the difficulty is met by exchange banks, which buy and sell forward exchange, and which are thus able to set off gains against losses, and

to provide the merchant with a certain exchange. But these banks have difficulties in meeting all cases, *e.g.* when the current of trade is for the moment in one direction; and for the facilities they give the merchant he of course has to pay more or less, according to the circumstances. Further, although the tendency of fluctuations has been generally in one direction, there have been moments when silver has risen for the time, and it seems to be the case that alternate fluctuations in opposite directions cause more embarrassment to trade than a steady fall. The inconvenience and loss are real, and it would no doubt be a great advantage if traders were able to make their bargains without incurring the risks of fluctuations in nominal exchange which they are unable to foresee or provide for.

20. But they must not be exaggerated. Such difficulties have always existed; and the trade of the world has been carried on in spite of them. They are now much less than they formerly were, in consequence of the rapidity of telegraphic communication, which enables the merchant to complete his contract quickly with the latest information. Some of the largest international trades in the world have been and are carried on under conditions of a *nominal* exchange which is perpetually fluctuating. Even if gold and silver could be made into one metal to-morrow, the difficulty of fluctuation in the nominal exchange would still exist in full force in trade with the numerous countries which use forced paper. These countries comprise some of the most important trading countries in the world, and some of our most important customers. The case of the United States during and after the Civil War, the case of the whole of South America, the case of Russia, and other European

countries which have had or still have forced paper—all of them countries with which we do a vast and continually increasing trade—are cases where exchange, being founded on no metallic basis whatever, has fluctuated even more than the exchange between gold and silver; and such cases show beyond doubt how large an amount of trade can be carried on and successfully developed in spite of such fluctuations.

21. Under such circumstances it is not surprising to find that the statistics of trade, so far from showing fluctuations between gold and silver to have exercised a predominant effect in depressing trade, show that in consequence of other more potent factors trade has developed most largely where these fluctuations have existed. For instance, the progress of the total trade of the United Kingdom during the recent fall in silver has been as follows[1] :—

Average of Years.	Total Trade.	Trade with principal Silver-using Countries.
	Millions £.	Millions £.
1873–1877	657	96
1878–1882	667—or 1·52% increase	98—or 2·1% increase
1883–1887	664—or 0·45% decrease	102—or 4·8% increase

According to the *Economist* (August 31st, 1895), in 1873 of our exports of British produce 14·34 per cent. were shipped to silver-using and 85·66 to gold-using countries; whereas in 1894 the proportion taken by silver-using countries had increased to 20·85 per cent., while that taken by gold countries had fallen to 79·15 per cent.

22. The trade of the United Kingdom with India,

[1] See *Report of Gold and Silver Commission*, Part I., para. 82.

including exports and imports, has during the fall of the rupee increased considerably faster than the whole trade of the United Kingdom—the proportion being 8·6 per cent. for the average of the years 1874-1879; 8·6 per cent. for the years 1879-1883; 9·9 per cent. for the years 1883-1887; and 9·2 per cent. during the years 1887-1892. During this period the rupee fell almost continuously, the highest price being 22·156*d.* in 1874, and the lowest 16·579*d.* in 1888.[1]

23. If it were worth while, it would be possible to multiply statistics of this kind indefinitely. The above are, however, sufficient to show that, whilst fluctuations in nominal exchange are an annoyance and impediment, they exercise no prevailing influence. If all the world could use one measure of value, it would no doubt grease the wheels of trade, just as the adoption of one uniform system of weights and measures would do. But such fluctuations do not prevent trade, and are not even dominant factors.

BOUNTY TO PRODUCERS IN SILVER COUNTRIES.

24. The second alleged evil is the alleged premium or bounty said to be given to producers in silver-using countries by the fall in silver. Bimetallists rely much on this argument, and it will be well to give their own words.

25. The following is an extract from a leaflet by Right Hon. H. Chaplin, published by the Bimetallic League, dated January 5, 1895.

"*Divergence in the Old Value of the Metals.*

"Gold having appreciated, while silver has remained stationary, the consequence has been the second result referred to—viz., a divergence in the old relative value of the metals.

[1] *Report of Indian Currency Committee*, App. p. 241.

"*How the Price of Wheat is affected by the Divergence.*

"This divergence in the old relative value of the metals has steadily widened since then until the ratio between gold and silver to-day is something like 30 to 1 instead of $51\frac{1}{2}$ to 1, which it used to be before. It is this divergence which explains the fact that the producer in certain silver-using countries is able to send wheat to England at a profit, at a price of 19*s.* or 20*s.* a quarter, or even less.

"The way in which it operates will be seen at once.

"A sovereign will exchange to-day for 20 rupees, where formerly it exchanged for 10, because the rupee, roughly speaking, has fallen from 2*s.* to 1*s.* The consequence is that, although the gold price of wheat in England has fallen from £2 to £1, the Indian grower is still getting 20 rupees a quarter for his wheat. Silver prices in India have not changed. *His 20 rupees will buy for him in India as much of everything as they bought before, and he is thus enabled to take a gold price for his wheat, which means ruin to the English grower, but which makes no change in his position.*

"*It is Artificially Depressed by a 'Currency Juggle.'*

"*The same thing holds good with regard to wheat from Argentina, with this difference, that the currency in Argentina is depreciated paper, instead of depreciated silver.*

"It is in reality by this 'Currency Juggle' that the market price of wheat is being abnormally and artificially depressed in countries with a gold standard like England."

26. The following is an extract from a paper by George Jamieson, Esq., H.B.M. Consul-General in China, which gained the Bimetallic Prize in 1894.[1]

One of the causes of the fall in prices, he says (p. 3), is "an enlarged area of supply consequent on the relative cheapness of silver to gold. As silver prices in Asiatic countries have not risen, the produce of those countries can be laid down in England at almost Asiatic prices."

And on pp. 7 to 9 he explains this as follows :—

"A very few words will suffice to make this clear. In the years preceding 1873, when the rupee was at 2*s.* nearly, the price of Indian wheat in Bombay was approximately 10*s.* per cwt., and the *Gazette* price of English wheat in London was about 54*s.* per quarter = 12*s.* 4*d.* per cwt. Allowing for quality and costs of transport, these prices

[1] *Injury to British Trade and Manufactures*, Effingham Wilson, 1894.

may be deemed equivalents. When the rupee exchange fell to 1*s.* 6*d.*, Indian wheat—the silver price of which in Bombay has, with temporary fluctuations, remained constant[1]—would cost in Bombay about 7*s.* per cwt., and could be laid down in London for something like 8*s.* 6*d.* All the other sources of supply remained open as before, the supply for the time being was greater than the demand, and consequently the price fell to the level of the lowest market. Again the exchange value of the rupee falls to, say, 1*s.* 1*d.* Indian wheat can now be laid down in London at nearly half the sterling price of 1873 (costs of transport having also in the meantime been greatly reduced), and consequently the price of wheat all over falls to a corresponding point.

"This is a fair illustration of what has been going on all over the world. We draw our supplies from all countries, wherever they can be procured most cheaply. By each successive drop in the gold value of silver, a greater and greater amount of produce has been admitted from India and other silver countries, and always at a cheaper rate. Had the rupee retained its old value of 2*s.*, it is perfectly certain that no wheat could be imported from India at present rates. There is no reason to suppose that the rupee price in Bombay would have been materially different from what it has been. Had the gold value of the rupee not fallen, the area of grain supply would never have widened as it has done, demand and supply would have been more evenly balanced, and the variations in price would have been confined within small limits.

"The same reasoning that applies to grain applies to every other article that can be supplied freely from silver-standard countries. The silver prices in those countries have, as the experience of twenty years has shown us, remained approximately steady, and necessarily the gold price has fallen. In no article, however, has the correspondence between the price of silver and the price of the article been so complete as in grain. In 1873, when the price of silver was 60*d.*, wheat stood at 54*s.* To-day silver is 28½*d.* and wheat 24*s.*, being a drop in the one case of 52·5 per cent., and in the other of 55·6 per cent."[2]

27. Similar arguments applied to the various productions of silver countries will be found in Mr. Howell's "Bimetallism," in Sir H. Meysey-Thompson's observations on his prize essay, in Sir W. Houldsworth's "Depression in Trade," p. 8; in Professor Foxwell's "Monetary Situation," p. 184, and in his Evidence to the Agricultural Commission 23,689—23,693—23,698;

[1] Official quotation: Wheat No. 1, per candy, 1873 ... R.34.8.0.
" " " 1893 ... R.32.11.1.
Prices and Wages in India.

[2] The recent adoption of a gold standard by Japan is a curious comment on statements such as these. F.

and the same Professor attributes, it may be observed, a similar effect to the depreciation in Argentine paper, qu. 23,706.

28. The most recent statement of this supposed grievance is to be found in the report of the majority of the Agricultural Commissioners, paras. 45 to 47, which are as follow :—

"Sec. 44. Gold having appreciated while silver has remained practically constant, the necessary consequence has been a divergence between the old relative value of the metals.

"It is alleged that silver has remained because in countries with a silver standard, like India, before the closing of her mints, there had been little or no change in the prices of commodities—*i.e.*, the purchasing power of silver had practically remained the same.

Sec. 45. This divergence in the old relative value of the metals has steadily widened since then, until the ratio between gold and silver to-day is something like 30 to 1, instead of 15½ to 1, which it used to be before.

"It is this divergence, the witnesses maintain, which explains the fact that the producer in silver-using countries is able to send wheat to England at a profit of 20*s.* a quarter, or even less.

"Sec. 46.—The mode in which it operates was explained to us by the following illustration :—

"Supposing that a sovereign will exchange for 20 rupees where formerly it exchanged for 10, because the rupee has fallen from 2*s.* to 1*s.*

"It follows that, although the gold price of wheat may have fallen very largely, quite possibly from 40*s.* a quarter to £1, the Indian grower selling at that price will still be getting 20 rupees a quarter for his wheat.

"If silver prices have remained the same in India, his 20 rupees will purchase for him as much, and are worth to him as much as they were before, and he is thus enabled to take a gold price for his wheat, which means disaster to the English farmer, but which makes no change in his position.

"Sec. 47.—The same argument, it is urged, holds good with regard to wheat from Argentina, with this difference, that the currency in Argentina is paper, instead of silver, neither of which have been subject to appreciation like gold; and it is emphatically affirmed by the witnesses that it is in reality by this 'currency cause' that the market price of wheat is being artificially depressed in countries with a gold standard like England."

And again, para. 66 :—

"We believe that the producer in the silver country does enjoy an advantage over his competitor in England; that he is enabled by the

fall in exchange to take a lower price for wheat without detriment to himself than his competitor in England, and that, pending an adjustment of prices which has not yet occurred and which may still be remote, that advantage must continue."

29. Let me add to the above extracts from Bimetallist writings the following argument. It was written in 1895 upon a memo. of mine by a valued Monometallist ally, to whose excellent judgment and practical experience I should gladly bow if truth would allow me. *Amicus Plato, sed magis amica veritas.*

"Lord Farrer's contention that the fall in the Indian exchanges during the period of the open mints—that is, from 1874 to 1894—was not an advantage to the native growers of produce in India, and did not save them from the disastrous consequences experienced by English farmers from the fall in gold prices of said produce, is opposed to the belief and experience of almost all those connected with Indian commerce.

"I will endeavour to show how this belief has been brought into existence, and how it has been confirmed by experience.

"Foreign trade is an exchange of commodities exported for commodities imported. But each of the millions of transactions that go to make up the total trade of any one year, when separated from all other transactions and traced throughout its courses, shows that what the seller parts with his produce for in a silver country is silver standard legal tender, and what the seller in a gold country parts with his produce for is gold standard legal tender. As an example, A represents an export house in India, and he gets an offer of 30*s.* per quarter for 100 quarters of wheat from B, a miller in London. He ascertains from the Indian growers the price of wheat in silver rupees, takes the cost of sea-carriage and incidental expenses, and adds a merchant's profit or commission, finds how much silver he can get for the gold price offered—*i.e.* at the exchange of the date, silver and exchange fluctuating closely together during the prevalence of an open mint—and if, as a result of all these calculations, he finds the gold price offered enables him to pay the rupee price required by the grower, he accepts B's offer, closes the contract, ships the wheat, pays the rupees to the grower, *receives the price in gold in due time in London, turns the gold into silver, and sends the silver out to India to be minted into rupees.*[1] If when this transaction took place the price of wheat was 30*s.*, and gold price of silver 40*d.* per ounce, and if, a few months thereafter, the gold price of wheat fell to say 27*s.* per quarter, and all other factors remained the same, then A could not accept B's offer of 27*s.* for another 100 quarters of wheat unless he could get the grower to lower his price in rupees; but the grower refuses and says he cannot afford to sell at lower prices without loss, and the transac-

[1] The italics are mine. F.

tion is about to fall through—because there is no hope of the gold offer being raised—for the abstention of the Indian seller does not in any way affect values in a market governed by supplies from other larger sources (America, Russia,[1] &c.); when suddenly the gold price of silver falls say 10 per cent, and A finds *he can then obtain for the gold he gets at 27s. per quarter of wheat, an additional quantity of silver that he can turn into as many rupees as will enable him to pay the old price to the grower*,[1] and he closes the transaction a second time and carries it through in the manner already described.

"Take the other side:—

"D is a merchant in Manchester, and he gets an offer from a native dealer in Calcutta for 100 pieces of cotton cloth at 5 rupees per piece. He obtains the manufacturer's gold price, say 6*s*. per piece, adds freights, expenses, a merchant's commission, and calculates how much gold he can obtain for the silver he will receive from the dealer, at the exchange of the day—*i.e.* the price of silver as measured in gold. If he finds that the result is satisfactory, he closes the bargain, ships the cloth, *receives the silver in Calcutta, brings it home, and parts with it for gold sovereigns.*[2] If afterwards the Calcutta dealer makes an offer of 5 rupees per piece, and meantime the gold price of silver has fallen, the transaction falls through, unless either the manufacturer—the gold price of cotton having suddenly fallen, and he not being able to get a higher price from any other market—lowers his price in gold, or the price of cotton having remained the same, and other markets offering higher gold prices, the Calcutta dealer has in time to raise his offer in rupees to enable him to obtain what he wants.

"*But it may here be said, no London miller really obtains silver for his gold and sends it out to be made into rupees in payment of wheat, and no merchant in Lancashire receives silver in payment of cloth in Calcutta and brings it home and sells it for gold sovereigns.* Quite true! *But that is simply because the exchange banks step in and act as clearing houses, and both transactions are settled by bills through their agency, but none the less the actual working of each separate transaction is exactly as stated above.*[2]

"These observations are based on the assumption, which in a general sense is true, that in India the rupee has been nearly staple in value;[3] in other words, that locally it has gone as far in buying commodities throughout these 20 years as it did before the fall in silver. Lord Farrer speaks scoffingly of increasing a trade by depreciating a currency. But under an open mint the currency was not depreciated in India. It was an automatic, self-adjusting, honest currency. But in this connection it should be bourne in mind that of the immense yearly importation of silver bullion to meet the payment of exports over imports, about one-half found its way through the mint into ornaments and hoards, and did not therefore go to

[1] This is important, and may be commended to the attention of those who, like the majority of the Agricultural Commission, think that India rules the price of wheat.

[2] The italics are mine. F.

[3] But see below para. 38.

swell the circulation of the country, or affect prices in any way, as abundance of money must do where coined money is practically the only medium of exchange as well as the standard of value.

"The balance of trade has always been largely in favour of India—exports exceeding imports—and therefore, while India was getting more in silver for her exports and paying more in silver for her imports from gold standard countries—other things being the same—she was a gainer in balance by the fall in silver. She was able to find a market for her surplus produce during the fall in gold prices, without readjustment of rents or labour prices, and was able to continue to pay the same land tax to Government (the owners of the land, and the representatives of the tax-payers) all through these years. Again, the fact of her being able to find a market for her surplus produce without accepting fewer rupees for the same quantity of produce, enabled her to purchase more of the produce of other countries she required (imports). But even with the assistance of the fall in silver she is exporting less wheat. The gold price of wheat has fallen so low, owing to heavy supplies from America, Russia, Argentina, and other countries, that Indian exports have shrunk during the past two years to a fifth of her average exports during 1883–92, though the price of silver on average was very much higher in these ten years than in 1893 and 1894."

30. The theory involved in the above quotations (for it is only a theory) is very widely held, and not, as we have seen, by Bimetallists alone. It is of first-rate importance, since it leads to the tempting, dangerous, and most mischievous conclusion that a country can by depreciating its currency increase its trade and profits at the expense of its neighbours. I need, therefore, no apology if I attempt at some length to show how fallacious this theory is.

31. The first answer to it is an appeal to facts. If the theory in question were true, the recent fall in silver ought to have revolutionised the trade of the world, and its effect ought to be seen in every page of trade statistics. As a matter of fact there is no such effect traceable in any account we have of any trade.

Bimetallists have been repeatedly challenged to show by statistics that a fall in exchange due to a depreciated currency has permanently increased either the general trade or the export trade of the country in which the fall has taken place, and they have never

attempted to do so. On the contrary, the evidence to the contrary furnished by statistics of trade is as strong as negative evidence can be, that no such result has happened.

32. The following are a few recent cases in which there has been depreciation of currency, viz:—in India, Chili, the United States, and Argentina. They have been selected for the purpose of showing how little parallelism there is between the depreciation of the currency of a country and its external trade, and more especially how little effect they have had in increasing its exports. In dealing with these examples I have found it convenient, in order to avoid repetition, to follow out the cases by showing, so far as possible, what has been the effect of the depreciation upon the internal condition of the country, and upon the relations to each other of the different classes of its population, reserving the theoretical explanation for a later page.

33. First of all, let us take the case of India.

The view taken by the Government of India was clearly stated by Sir David Barbour in his speech introducing the Bill for closing the Mints.[1] This statement is as follows:—

> "It has also been said that if India has a gold standard the countries which retain the silver standard will have an advantage over India in the production of commodities for export. I attach no importance to this argument so long as the Indian standard is in itself a good one. A sudden rise in exchange will injuriously affect certain industries for a time. A sudden fall in exchange may give them an undue amount of profit and supply, a temporary and artificial stimulus. But the principles which regulate international trade rest on a totally different basis, and it seems to me an obvious truism that our manufacturers and our commerce will advance more rapidly under a system which gives India the same standard of value as her principal customers, than they could possibly do under a system which gives us one standard of value and our chief customers a different one, the two standards varying in relative value from time to time in a manner which defies calculation."

[1] *Parliamentary Paper*, c.—7098, 1893, p. 13.

34. The subject was much considered by Lord Herschell's Committee, and this is what they say, in language which is the more impressive from its moderation and from the admissions it makes[1] :—

"It is said that the tendency of a falling exchange is to stimulate exports; that, inasmuch as more silver—*i.e.* a higher silver price—is received in respect of the same gold price, whilst wages and the other factors in the cost of production do not increase in the same proportion, production becomes more profitable, and is therefore stimulated. Assuming this to be true, the effect of each successive fall must be transitory, and can continue only until circumstances have brought about the inevitable adjustment. Although one may be inclined, regarding the matter theoretically, to accept the proposition that the suggested stimulus would be the result of a falling exchange, an examination of the statistics of exported produce does not appear to afford any substantial foundation for the view that in practice this stimulus, assuming it to have existed, has had any prevailing effect on the course of trade; on the contrary, the progress of the export trade has been less with a rapidly falling than with a steady exchange. For example, from 1871–72 to 1876–77 the gold value of the rupee fell constantly from 23·126*d.* to 20·508*d.*, or about 11¼ per cent.; the exports of merchandise were actually less in the latter year than in the former, although in 1876–77 their rupee value exceeded by about 10 per cent. that of the exports of either 1870–71 or 1872–73. From 1878–79 to 1884–85 exchange was fairly steady, the average rates varying only between 19·961*d.* and 19·308*d.* per rupee, or about 3¼ per cent.; and during those six years the exports rose by no less than 36½ per cent. Again, between 1884–85 and 1888–89 the fall of the rupee was very rapid, from 19·308*d.* to 16·379*d.*, or over 15 per cent., and the exports increased during those four years by 16½ per cent.; but in the single year, 1889–90 when there was a slight improvement in the exchange, the exports increased by more than 6½ per cent. It is said, too, that whilst a falling exchange tends to stimulate exports there is a corresponding tendency to check imports. Here, again, statistics do not seem to show that diminished imports have been coincident with a lower exchange. Taking the same periods as before, from 1871–72 to 1876–77, when exchange fell 11¼ per cent., imports of merchandise into India increased by 17 per cent.; from 1878–79 to 1884–85, when exchange was steady, the increase of imports exceeded 47 per cent.; between 1884–85 and 1888–89, when the rupee fell about 15 per cent., the imports were augmented by nearly 25 per cent.; while in 1889–90, when exchange slightly rose, the imports were rather less than in the previous year. Upon the whole, we cannot see any evidence that the effect of a falling exchange on the country at large, in influencing either exports or imports, has over a series of years been very considerable. Some trains of *a priori* reasoning would seem to lead to the same conclu-

[1] Para. 27.

sion that, even if a fall in the gold value of the rupee does stimulate exports, the result is not necessarily to the benefit of India as a whole, though it may temporarily benefit the employer at the expense of the wage-earner, because wages rise more slowly than prices."

35. Since 1893 the subject has been further investigated. Is it a fact that the exports of wheat from India have risen when silver has fallen?

The following table exhibits in one view for each year since 1870 the price of silver, the export of wheat in quantities from India, and the import of cotton piece goods, also in quantities, into India :—

STATEMENT SHOWING THE AVERAGE PRICES OF BAR SILVER PER OUNCE STANDARD IN LONDON, WITH THE QUANTITIES OF WHEAT (IN GRAIN) EXPORTED FROM, AND OF COTTON PIECE GOODS (EXCLUDING HANDKERCHIEFS) IMPORTED INTO INDIA IN EACH OF THE UNDERMENTIONED YEARS.

Years.	Annual Average Price of Bar Silver per ounce standard, in London. (*a*)	Quantities of Wheat (in grain) exported from British India. (*b*)	Quantities of Cotton Piece Goods (excluding handkerchiefs) imported into British India. (*b*)
	d.	Cwts.	Yards.
1872	$60\frac{5}{16}$	394,000	Cannot be given.
1873	$59\frac{1}{4}$	1,756,000	
1874	$58\frac{5}{16}$	1,074,000	
1875	$56\frac{7}{8}$	2,511,000	1,186,142,000
1876	$52\frac{3}{4}$	5,587,000	1,186,419,000
1877	$54\frac{13}{16}$	6,373,000	1,358,861,000
1878	$52\frac{9}{16}$	1,057,000	1,127,732,000
1879	$51\frac{1}{4}$	2,202,000	1,333,741,000
1880	$52\frac{1}{4}$	7,444,000	1,776,507,000
1881	$51\frac{11}{16}$	19,901,000	1,624,452,000
1882	$51\frac{5}{8}$	14,194,000	1,642,800,000
1883	$50\frac{9}{16}$	21,001,000	1,724,096,000
1884	$50\frac{5}{8}$	15,851,000	1,734,098,000
1885	$48\frac{5}{8}$	21,069,000	1,743,378,000
1886	$45\frac{3}{8}$	22,264,000	2,155,713,000
1887	$44\frac{5}{8}$	13,538,000	1,839,118,000
1888	$42\frac{7}{8}$	17,611,000	2,126,553,000
1889	$42\frac{11}{16}$	13,802,000	1,997,233,000
1890	$47\frac{11}{16}$	14,320,000	2,014,443,000
1891	$45\frac{1}{16}$	30,307,000	1,882,884,000
1892	$39\frac{13}{16}$	14,973,000	1,808,341,000
1893	$35\frac{5}{8}$	12,157,000	2,129,705,000
1894	$28\frac{15}{16}$	6,890,000	2,257,679,000
1895	$29\frac{7}{8}$	10,004,000	(*d*) 1,714,879,000
1896	$30\frac{3}{4}$	(*c*) 1,911,000	(*c*) 1,996,980,000

NOTES.—(*a*) The figures in this column are taken from Messrs. Pixley and Abel's circulars.
(*b*) The figures in these two columns are taken from the "Statistical Abstract for British India," and they relate to the exports or imports during the twelve months ended 31st March of the year following that against which they are placed.
(*c*) These figures are taken from the "Monthly Accounts of the Trade of British India," and may be subject to revision.
(*d*) This figure is taken from the "Annual Statement of the Trade of British India," the figure given in the "Statistical Abstract" being apparently incorrect.

36. It is perfectly clear from this table that there is no kind of coincidence between the fall in the price of silver and the export of wheat from India. The fluctuations are widely divergent, and it is noteworthy that during the last few years, when the price of silver has shrunk to an abnormally small figure, the export of wheat from India has also shrunk.

37. On examining the above table year by year it will be seen that, even supposing each fall in exchange to have a monetary effect on increasing exports and diminishing imports, that effect disappears entirely when we take periods of a year, much more when we take longer periods. There is not to be traced in any part of this table any rise in exports of wheat or fall in imports of cotton goods corresponding to the fall in silver; and when we look at the aggregate results over a series of years, we find that silver has been steadily and heavily falling, whilst the export of wheat has also been falling heavily though irregularly, and the import of cotton goods has remained, on the whole, steady.

38. It is said, as we have seen above, that silver prices had remained stationary in India. Indeed, a large part of the Bimetallic argument is founded on the supposed fact that silver prices have been more stable than gold prices; and on the conclusion, erroneously drawn from this supposed fact, that silver was a more stable standard than gold. This supposed fact is proved by more recent and more careful inquiry to be founded on insufficient data, and the result of that inquiry seems to show [1]

(1) That silver prices, both before and after the so-called demonetisation of silver, have fluctuated more than gold prices.

[1] See an elaborate article by Mr. F. Atkinson on "Silver Prices in India" in the *Statistical Journal* of March, 1897, pp. 92–95.

(2) That since the demonetisation of silver, silver prices have risen largely.

The following are Mr. Atkinson's Index Numbers for the Indian silver prices of all articles from 1871 to 1893, the year of closing of the Indian mints.

INDEX NUMBER OF SILVER RUPEE PRICES OF ALL ARTICLES IN INDIA FROM 1871, TAKEN AS 100 TO 1893.

1871	100	1877	138	1883	106	1889	125
1872	105	1878	148	1884	114	1890	125
1873	107	1879	135	1885	113	1891	128
1874	116	1880	117	1886	110	1892	141
1875	103	1881	106	1887	111	1893	138
1876	107	1882	105	1888	119		

39. It may be added that, as might be expected, prices are in India, as a whole, much more irregular than in London; and that an examination of details shows much greater fluctuations in the prices of different classes of goods than are shown by the above general figures. Too much stress must not therefore be laid on general conclusions drawn from such figures. But they are sufficient to show how entirely without foundation are all the arguments drawn from the supposed stability of silver prices; and they are also sufficient to show that silver prices have risen in answer to the fall in silver.

40. But even supposing that silver prices in India had not risen, or had not risen in proportion to the fall in the gold value of silver, what would this mean? Why, simply that the fall in the value of silver has counteracted the fall in the value of goods, and has prevented the fall in silver prices which has taken place in gold prices. If silver had not fallen, the silver price of wheat and other Indian products would have fallen, just as the gold price of similar articles has fallen, and from the same causes, and the effect on the

markets in this country would have been just the same as it is now.

41. The case of the Bimetallists is that silver is of just as much value to the ryot as it ever was, and that he gets as much as he ever did; and consequently, that though the gold price of silver is lower, he is none the worse. But this, as we have now seen, is not the fact. In the first place, prices have risen, and he has, according to the latest figures, to pay more for all that he buys. But looking to the transactions between the two countries, what really pays for his wheat are the goods and services which England exports to India for his consumption; and for all of these, as a consequence of the fall in silver, India certainly pays just as many more rupees as she receives more rupees for her wheat. "But," say the Bimetallists, "the ryot consumes very little English produce." Is this so as a matter of fact? If it were, why should the Lancashire manufacturer make such an outcry against the imposition of the Indian duties on manufactured cotton?

42. There is one important peculiarity in the Indian case. The Indian Government is a paternal Government, and does much for its subjects, directly or indirectly. It makes railways and imports railway material; it imports material of war; above all it imports English brains and English hands; and for all these it has to pay England in gold. But it receives its revenue in rupees, and most of this revenue is in the form of a fixed rupee rent, or land tax, which cannot be altered in nominal amount. As silver declined in value the Indian Government had to find more rupees in order to pay its gold debt, and this it did by selling for gold in London Council Bills, which are in effect orders on the Government of India for payment of rupees in India. These orders for silver in India

are used to pay for the exports of Indian produce with which India really discharges its debt. The Indian Government are therefore, *pro tanto*, exporters of Indian produce, and their action stimulates the export of that produce. In thus acting the Indian Government really do just what any other trader would do who had debts to pay in England. The debt of India is not increased by the fall in the rupee, but the burden is differently distributed, and the action of the Indian Government brings this difference into prominent relief.

43. On the one hand, the ryot does no doubt gain some advantage by the fall in silver. One of his chief outgoings is the land tax, and this is a fixed silver payment. The real burden of this is reduced by the fall in silver. But what is the consequence? The Indian Government, which, as we have seen, is a paternal Government, and which does for its subjects many things which Englishmen would do for themselves, is obliged to economise in all directions—in improvements of civil and judicial administration, in public works, in the Famine Fund, all of which economies are so much loss to the ryot. Finally, it is obliged, with much reluctance, to impose additional taxation. All this, no doubt, more than outweighs any advantage which the ryot gains by the reduced value of his land tax, and is not only a serious embarrassment to the Indian Government, but a loss to the ryot and the people. Any gain which the wheat-producing ryot makes by the fall of the rupee is outweighed, and more than outweighed, by the diminished efficiency of his Government and by his increased taxation.

Where, under these circumstances, is the advantage to the Indian ryot? Under the circumstances de-

scribed above, it is indeed possible that his means and his power of purchasing English cottons may be restricted, but it is not possible that he should be thereby enabled to undersell the English farmer. And if the exporting merchant to whom he sells makes a temporary profit at his cost, that profit is made at his cost and at the cost of the Indian Government, and it may be added that profit must, like other profits made under similar cases by exporting merchants, be of very short duration.[1]

44. Let us take another concrete case—that of Chili. The account of it is taken from the *Times* of 6th December, 1894. Though unable to verify the figures from official sources, I insert it as an apt illustration of what I believe to be a general truth. Chili has had a forced and depreciated paper currency, the value of the dollar being reduced to 12d. The labourers' aggregate annual wage in currency is put at $186,000,000, of which it is estimated that 33 per cent. is spent on imported articles. With exchange at 12d., this would mean an aggregate purchasing power of £9,300,000 and of purchasing power expended on imports £3,100,000. With exchange at 24d. instead of 12d., this would mean, after allowing 25 per cent. for diminution of nominal wage, an aggregate purchasing power of £13,950,000 and of £4,487,000 to be expended on imports. So that by a reduction of the value of the dollar from 24d. to 12d. £1,387,000 is lost to commerce and much more to the labourer. The consequence of such a state of things was a large reduction in external trade, and especially in the importation of articles consumed by the labourer. "The lower," says the writer of the article, "the value of the paper dollar falls, provided the fall be rapid enough to forestall any rise in the wage rate, the

[1] As regards this point, see below, para. 65.

greater are the profits of working any enterprise where the product has a gold value—such, for example, as saltpetre, minerals or cereals for export. In fact, to put the matter tersely, we may consider that in all cases *the employers of labour gain by the depreciation whilst the loss falls on the working classes.*" And it may be that the country as a whole loses.

45. Let us take another case—viz., the depreciation of the currency of the United States. It has been shown by the elaborate figures recently prepared by the statistical officers of the United States, that there has during the last forty or fifty years been a great rise in the wages in the United States; that the only exception was during the period of inflated currency, when prices rose very much—much more than wages; that wages measured in gold actually declined during this period; whilst prices measured in gold rose, making the real purchasing power of the reduced nominal wages still less; and that from the resumption of specie payments gold prices have steadily fallen, whilst gold wages have steadily risen.[1] It would be also easy to show that during the period of inflation—which was, of course, also the period of the war—the export trade as well as the whole trade of the United States fell off.[2] In short, the effect of depreciating the currency was, as it always is, to reduce the real wages of the labouring classes, and at the same time to depress the producing power of the country.

46. Again, let us take the case of Argentina, which now occupies the third place as a wheat-exporting country among the nations of the world. We are told by the Bimetallists that in consequence of the depreciation of Argentine paper money agriculture thrives in

[1] See figures and references given App. to *Report of Agricultural Commission*, Q, 38,310 and App. C.

[2] See *Statistical Abstract of the United States for* 1893, p. 70.

Argentina, and "that the higher the premium on gold—*i.e.* the more the paper is depreciated—the lower the price the Argentine farmer can take, an advantage which enables him to undersell his rivals in all parts of the world."

But let us hear a competent witness (Mr. Goodwin),[1] who has examined the case on the spot. He says that the fluctuations in currency are at present unimportant factors; that Uruguay with a gold currency competes successfully with Argentina in exporting produce; that any rise in the gold premium is known over the whole country in twelve hours and that prices are altered accordingly; that the depreciating currency causes heavy loss in savings, and makes wages miserably low; that the statement so often repeated in agricultural newspapers, that the Argentine farmer can grow wheat cheaply very much because with gold at 350 he really gets equal to 70*s.* per quarter in effective money, when the price in Europe is 20*s.* per quarter, is all wrong, and that the great factor of the cheap production is that the Argentine farmer is content with conditions of life that no English or United States farmer would accept, and that he is, moreover, favoured with plenty of cheap good land and a good climate.

47. What do statistics say?

ARGENTINA EXPORTS.[2]

	1891	1892.	1893.	1894.	1895.
Exports of wheat, cwts.	2,479,930	3,476,861	7,859,840	13,283,867	11,432,721
Gold premium ...	466	392	362	429	379
Price of wheat ...	37	30·3	26·4	22·10	23·1

[1] *Wheat Growing in the Argentine Republic*, W. Goodwin, Liverpool, pp. 15, 35, 56, 57, 60, 62.

[2] From a paper written by Mr. H. Le Roy Lewis for the Gold Standard Defence Association.

In spite of the declining premium on gold and the dwindling price of wheat, the export of wheat to this country has largely increased in the last five years, which shows clearly that there can be no connection between the gold premium and the export of wheat.

48. Uruguay is the next-door neighbour of Argentina, but Uruguay has a gold standard and no supposed advantage from a depreciated currency, and how do Uruguay's exports of wheat compare with those of Argentina?

EXPORTS OF WHEAT FROM URUGUAY TO THE UNITED KINGDOM.[1]

	1891.	1892.	1893.	1894.	1895.
Cwts.	12,000	45,000	32,745	317,324	692,000

49. It would be easy to multiply concrete illustrations of the principles I have tried to explain, and to show that in none of them is it the fact that depreciation of the currency of a nation has increased its productive powers or its means of competing with other nations. If it was true, as suggested in the Bimetallic extracts I have quoted, that the fall in silver to one-half its value has proportionately increased the productive powers of the silver countries, such a factor would have revolutionised trade, and would have been visible in every page of trade statistics. As it is, no such result is visible. The factor of exchange, whatever its intrinsic importance may be, is not a dominant factor in trade statistics, and I defy the Bimetallists to show, what they have certainly not shown hitherto, that there is any case in which a comparatively depreciated currency has permanently

[1] From Mr. H. Le Roy Lewis's paper.

increased the productive power of a nation, or in which, where a depreciated currency may have been accompanied by some increase of trade, that increase is not really attributable to other and more substantial causes.

50. The case might well rest here as one in which a theoretical statement is not only not proved, but is disproved by facts. But the theory appears to many so plausible, and its tendency is so mischievous, that we shall not waste time in considering carefully what it means and submitting it to further tests.

51. It will be found to involve a number of astonishing puzzles and impossibilities.

52. It involves, in the first place, the principle that a nation may, by simply depreciating its currency, enable its producers to compete successfully with the producers of every country whose currency has not depreciated. Any principle more preposterous and more dangerous it is scarcely possible to imagine.

53. In the second place, it involves the absurd conclusion that silver, one of the most transportable of commodities, can change its value to any extent in one country without also changing its value in another. For it asserts that silver, which has lost more than half its purchasing power in London, still retains its old purchasing power in India.

54. In the third place, it involves the Protectionist fallacy that a country can export without importing, and can by so doing become rich and prosperous at the expense of her neighbours; for it assumes that a depreciation of currency increases exports while it diminishes imports, and that this success of exports benefits the country where the depreciation takes place at the cost of its customers and competitors.

55. Lastly, it involves the conclusion that a real

profit on production can be made by an alteration in nominal exchange, *i.e.* by a change in the relative values of currencies, without loss to any one, except in the long run to the competing producer in foreign countries.

56. The theory that the depreciation of the currency of one country in terms of the currency of another, benefits the country whose currency is depreciated by increasing its exports, has, then, on the one hand, no foundation in experience, whilst on the other hand it involves consequences inconsistent with a number of established economic truths. How is it, then, that it maintains a hold on the minds not only of Bimetallists but of many sensible men, who are not tainted with the Bimetallic heresy?

57. I believe the reason to be that men of business whose daily concern is to watch the exchanges fail to see what are the real facts which lie beneath the superficial phenomena of exchange. They confound one cause of fluctuation of exchange with another, and attribute to exchange itself a substantive existence and importance which really belong to the underlying and unrecognised factors out of which it arises.

58. There is one obvious fallacy which runs through all the arguments I have quoted in paras. 25 to 29. This fallacy consists in a mistaken attempt to get at the result of international dealings by isolating transactions which are never isolated in reality, and by dealing with each of these transactions as if it were an actual exchange of silver or gold coin for goods, and of goods for gold or silver coin; whereas gold and silver coin do not enter into the transaction at all, except as counters which are set off against one another.

59. Take, for instance, the quotation I have given (para. 29) from my Monometallist friend and critic,

which is a fair and moderate example of the arguments I am considering. It is not, I venture to say, a complete or, indeed, an accurate account of what really happens; and it errs because it isolates each transaction of purchase and sale instead of treating international purchases and sales as what they really are, viz. parts of one great transaction. The seller does not really exchange his goods for either silver or gold legal tender. The Indian exporter does not get paid by silver from England. The Manchester merchant does not get paid by gold from India. To the extent to which silver is imported into India it is true that the Indian merchant receives silver in exchange for goods; but the amount of silver imported into India is small when compared with her whole imports, probably less than one-tenth, and it has not increased since the fall in the value of silver. We may therefore leave it out of account. What India receives from England are English goods or services; and what England receives from India are Indian goods. These are really bartered or set off against one another, and silver and gold coin are merely the standards or measures of value by which they are exchanged.

60. My critic admits that his Indian exporter A does not actually import silver; and that his English exporter D does not actually import gold; and he attributes their failure to do so to the intervention of exchange banks. But this really makes no difference. Neither A nor D would import either silver or gold if there were no such things as exchange banks. Those banks do not in the main carry on their business by exporting or importing silver or gold, but by setting off claims for gold in London against claims for silver in India. And if there were no exchange banks A and D would have to do exactly the same thing for

themselves. Supposing the wheat and the cloth to be of the same value, and supposing the trade to be confined to A and D, A would have to exchange or set off his claim for sovereigns in London against D's claim for rupees in India. In effecting this claim or set-off, any change which might take place in the relative value of the sovereign and the rupee would tell equally, but in opposite directions, upon the two claims, and the effect would be to neutralise the effect of the change. Suppose that the rupee falls in gold value, and suppose that gold prices remain unaltered, the Indian wheat will bring in a larger number of rupees, but the Manchester cloth will cost a larger number of rupees, and the transactions will, so far as a change in the relative value of gold and silver is concerned, exactly balance each other under the changed value of the rupee and the sovereign just as they did before the change.

60. What the Indian exporter seeks for and gets is not a remittance of silver to India but an order for payment of silver in India which may be used to make payments in India. What the English exporter seeks for and gets is not a remittance of gold to England but an order for the payment of gold in England which may be used to make payments in England, and these two orders are exchanged against one another in such a manner that any fall in the gold value of silver operates at the same moment and to the same extent, but in opposite directions, upon both, so that its effect upon the balance of international trade is completely neutralised.

61. The point is so important that it is worth while to illustrate it further. Let us suppose, in the first instance, that the two businesses are combined in one and the same person. Let us suppose that this person,

as Indian exporter, has a cargo of corn to exchange for a cargo of cotton manufactures, both being of the same value, and both giving him an equal profit on the transaction. Suppose that the rupee is originally worth 2s., or, in other words, that ten rupees are equal to £1, and suppose that afterwards the rupee becomes only worth 1s., or, in other words, that twenty rupees become equal to £1. This difference in the value of the rupee and the £ will of itself make no difference in the exchange of the cargo of corn for the cargo of cotton, or in the ultimate result to the merchant. In the first case he will give a certain number of rupees for his corn in India, and will get one-tenth of that number of sovereigns for it in England; and he will give a certain number of sovereigns for his cotton in England, and will get ten times that number of rupees for it in India. In the second case he will give a certain number of rupees for his corn in India, and will get one-fifth as many sovereigns for it in England, instead of one-tenth, as he did before; but he will also give a certain number of sovereigns for his cotton in England, and will get twice as many rupees for it in India as he got before. On the whole transaction—supposing it to be simply completed thus, and supposing that there is no other change—he will be neither a gainer nor a loser by the change in the relative value of the sovereign and the rupee. He will be no more a gainer or a loser by the change than he would be by a change in the yard measure by which he sells his cotton, or in the pound weight by which he sells his corn.

62. What is true of a single merchant is also true of the two countries as a whole. The trade between India and England, with ten rupees to the £, will be exactly the same as the trade at twenty rupees to the £. The

difference will be in the number of rupees and of pounds sterling in which the goods are measured, not in the goods themselves or in the profit made by exchanging them. Of course, the real transaction is much more complicated, but the above analysis shows how groundless is the supposition that an alteration in the standards of value by which an exchange of goods is affected alters the real character of the exchange.

63. What is true of the Indian silver currency is also true of any other currency which suffers depreciation in respect of a gold standard. If the quantity of Argentine paper which the cultivators can get for a gold sovereign is increased, the quantity they have to give for a gold sovereign is increased also, and in exactly the same proportion. The rupee and the sovereign—and the paper and the sovereign—change their relations for sellers as for buyers, and for buyers as for sellers. They are the measures of the goods bought and sold, and in varying with one another can no more alter the real terms on which goods are exchanged than a change in the relative proportions of a yard and a mètre, a pound avoirdupois and a kilogram, could alter the conditions of exchange. The terms would be altered—the goods would remain.

64. What, then, is the explanation of the fact stated by my critic, that the Indian exporter of wheat is enabled by a fall in the gold value of the rupee to conclude a bargain which he could not have concluded before the fall?

If, and so far as the fall is due to the actual importation of silver into India, the explanation is simple. Silver is imported, like any other article, because India requires it, and therefore takes its place in the international account like any other article of import,

calling for an export in return, and causing *pro tanto* a fall in the *real* exchange.

If the fall is a fall in the *real* exchange—*i.e.* if it is due to an altered balance of liquidation between the two countries, calling for additional Indian exports—the fact in question needs no explanation, and the balance is very soon adjusted by such exports. But it is impossible, as we have seen, to distinguish accurately between the *real* and the *nominal* exchange, and any fall in exchange, however caused, has for the moment the effect on the Indian exporter which my critic attributes to it. It is the *nominal* and not the *real* exchange which plays the chief part in this controversy; and the question remains, "How does this fall assist the Indian exporting merchant?"

65. If we look at the cases I have given above—the cases, namely, of India, of Chili, of the United States, and of Argentina—we find indications of one common feature incident to all these cases of a depreciated currency, viz. that the wage-earner or peasant producer suffers some temporary loss. In this fact we find, I believe, a key to the puzzling question raised in the preceding paragraph. The answer to it is to be found in the same fact which lies at the bottom of so much of the present controversy; the fact, namely, that, whether at home or abroad, a depreciating currency, whilst it cannot possibly increase the aggregate productive power of the country, or create additional profits on any given transaction or set of transactions, can and often does distribute them differently by diminishing that part of the profit which goes to the wage-earning workmen or peasant proprietor, or other ultimate producer, and increasing that part of the profit which goes to the capitalist employer or exporting merchant. But this profit is of very short

duration. Either by a rise of internal prices, or by a check on imports, or in some other manner, the balance is very quickly adjusted, the temporary profit earned by the exporting merchant comes to an end, and exports are again governed not by the relative values of gold and silver but by the commercial demands and relative liabilities of the two countries.

66. The following is an attempt to explain my meaning by an analysis of an imaginary case illustrating what I believe to be the real process. I am quite aware how imperfect and inadequate such imaginary cases are. But, regarded as illustrations, they are not without value.

67. In this analysis I have, for the sake of simplicity, omitted any notice of *real* exchange—*i.e.* exchange arising on the balance of trade, any notice of freight and other charges, and any notice of normal profits; elements which, though always present, do not enter into *nominal* or *currency* exchange.

68. First, assume that a ton of Indian wheat will exchange for 1,000 yards of English cotton cloth. Secondly, assume the Messrs. Davis and Co. are Anglo-Indian merchants. Then let us suppose that Davis and Co. procure a ton of wheat in Bombay, send it over to England, and there exchange it for 1,000 yards of cotton cloth, which they bring back to Bombay, and there dispose of in payment for their wheat. In this there is, of course, no question of currency exchange.

Next let us suppose that, instead of simple barter, there is interposed *money*, and that this money is gold sovereigns (as is the case in the trade between England and Australia). Let us further suppose that the value of the ton of wheat and of the 1,000 yards of cloth is £10.

In this case, excluding profit, &c., Davis and Co. give £10 for their wheat in Bombay, sell it for £10 in London, buy 1,000 yards of cotton cloth with the same £10, bring back the cloth to Bombay, and sell it there for £10.

In this case, again, there is no currency exchange, because the standard coin is the same.

69. Next suppose that the currency in India is rupees, but that rupees bear a fixed ratio to the pound sterling, say 10 rupees = £1, or 1 rupee = £$\frac{1}{10}$ = 2s. Here Davis and Co. give 100 rupees for their wheat in Bombay, sell it for £10 in London, buy 100 yards of cloth with the £10, bring back the cloth to Bombay, and sell it there for 100 rupees, with which they pay for the wheat.

Here again, though there is a currency exchange, it has no effect in altering the ultimate terms of the transaction.

70. Now let us suppose that the rupee, instead of having a fixed relation of 10 rupees to the pound sterling, varies in gold value. And first let us suppose that it falls 4d. in gold value; so that one rupee = 1s. 8d., or £1 = 12 rupees, and £10 = 120 rupees. Observe that it is assumed here that the change is a fall in the rupee, not a rise in the pound sterling.

Sooner or later the Indian silver price of cloth will rise or, if it is falling from other causes, will be prevented from falling further; purchases and sales will be adjusted; and when this happens Davis and Co. will receive 120 rupees for their 1,000 yards of cloth, and all will be as it was before except the number of rupees used. Nor can this consummation long be delayed, for imports must balance exports and *vice versa*. But let us suppose that this does not happen at once, and that for a very short time Indian silver prices and

English gold prices both remain unchanged. Davis and Co. will now give 100 rupees, as before, for a ton of wheat; they will sell it, as before, in England for £10; with the £10 they could still buy 1,000 yards of cloth; they could send still the 1,000 yards of cloth back to Bombay, and sell it there, as before, for 100 rupees. But this, of course, they will not do, because the £10 they get for their wheat in England will buy 120 rupees, and *ex hypothesi* this 120 rupees will, for the moment, buy in India as much of Indian goods and labour as 120 rupees did before the fall in exchange. They will therefore make a profit on the transaction of 20 rupees; and rather than bring back £10 worth of cloth to pay for the wheat they have purchased, they will buy 120 rupees with their £10, pay 100 rupees to the ryot for his wheat as before, and put the extra 20 rupees into their own pocket. How they will employ this extra profit of 20 rupees will depend on the state of the markets. They may spend it on themselves, or keep it; or they may buy more wheat in India from the ryot to be sold in England, or more cloth in England to be sold in India. Anyhow, they will not, so long as Indian prices are unmoved, give it to the ryot in return for his original ton of wheat.

In this transaction, which, of course, is a great exaggeration of actual facts, there is no real increase of profit on the whole transaction. The wheat is really worth no more than it was worth before, and *ex hypothesi* sells for the same gold price; the cloth is no cheaper than before, and the wheat buys no more of it. There may *possibly* be a few more rupees sent to India; but there is a great change in the distribution of the profit. Davis and Co. get one-sixth more of the whole price of the wheat than they did before, and the ryot, who formerly received the whole, now only receives five-sixths

of it. This process would go on so long as they have to pay the ryot only 100 rupees for a ton of wheat. As soon as the price rises to 120 rupees, the effect of the fall in exchange is at an end. In the meantime Davis and Co. have a good time of it at the cost of the ryot.

Now let us suppose, after prices have settled down to the ratio of 1 rupee = 1s. 8d., or £1 = 12 rupees, it again rises; and that, as before, prices do not at once change. Then Davis and Co. will have to pay the ryot 120 rupees for his wheat; they will sell the wheat in London for £10, as before; they may buy £10 worth of cotton cloth, as before; and this cloth they will sell for 120 rupees in Bombay, as before. There is no real loss on this transaction. The wheat and the cloth remain as before; but the distribution of the proceeds is different. The ryot will receive the whole of the price of his wheat; and Davis and Co. will, by the appreciation of the rupee, lose the extra profit they had made by the depreciation.

71. I believe that this is a sound analysis of an imaginary case which is a fair type of what really happens. There are surmises of this fact in some of the Bimetallic publications. But the Bimetallists fail to draw the proper conclusions from it. They assume that when the exporter makes his profit the ryot is as well off as before; in other words, that the silver which is worth half as much as it was to every one else remains of the same value to the ryot—or, in other words, that silver which has lost half its value in London remains of the same value as before in Calcutta—a thing wholly impossible.

72. In the above imaginary case I have omitted any reference to the part which, as pointed out above (para. 42), the Indian Government plays in the matter.

By selling Council Bills it stimulates exports in order to pay its gold debts in London. But on the assumption that it is silver which has fallen, its need to do this is caused not by any increase in its gold debt but by a deficiency in its silver revenue. Its position is simply that of any other Indian debtor, and the exports which it stimulates are no more profitable to India or to Indian exporters than any other exports rendered necessary by the liabilities of India.

73. In the above paragraphs I have made an attempt to state the principles which underlie this question of exchange, and to show that, according to those principles, no such consequences can follow from the fall in the silver exchange as are attributed to it in the Bimetallist extracts above quoted.

For those who do not care to examine these principles there is another argument of a more obvious character.[1] The proposal of the Bimetallists is to put a stop to the illicit advantage which silver countries are now supposed to enjoy, by restoring silver to its former gold value and maintaining it there. What effect would this have on our trade and production? Let us consider what silver countries produce. Wheat is the one great article which we consume at home in which they compete with our farmers. But in the production of wheat it is not India but North America, a gold country; Russia, which is becoming a gold country; and Argentina, a forced paper country, which are our severest competitors, so that if India were excluded from our markets the price of wheat would remain just what it is. Of the other articles which we import from silver-using countries, almost all are articles which we do not produce ourselves and which we use as food or raw material. If, therefore, by manipulating silver, we

[1] See *Economist* of 31st August, 1895.

were to succeed in making these articles dearer and scarcer, we should be cutting our own throats.

74. I feel that the length at which I have dwelt on bounty or premium supposed to arise from a falling or "fallen exchange," requires some apology. My excuse must be the extraordinary exaggerations of the Bimetallists, the real difficulty of understanding the phenomena of exchange, and the mischief and danger of a theory which proclaims that a nation can grow rich at the expense of its neighbours by depreciating its standard of value.

DIFFICULTIES OF SILVER COUNTRIES IN PAYING GOLD DEBTS.

75. The third of the mischiefs alleged to have been caused by the fall in silver is the difficulty experienced by silver-using countries in paying their gold debts. As these debts are really paid in produce and not in silver or gold, the gold debt of a silver country, such as India or Mexico, is not really increased by a fall in silver. If India and Australia each owe a million sterling to England, the value of that million will be no larger for India, which uses silver, than for Australia, which uses gold. But since India uses silver in her internal transactions, and Australia uses gold, adjustments have, as we have seen, to be made in India which are not needed in Australia, and these adjustments are the cause of serious inconvenience and, perhaps, of political danger. This inconvenience is brought into great prominence in India by the fact that the Indian Government, which is an honest and a solvent Government, is the principal debtor, and has to accommodate the public revenue and expenditure in silver to the demand for interest on its gold debt.

76. It is unnecessary to enlarge on the magnitude of this evil. It has found its place in every Indian Budget for many years; it has led to two Government inquiries in this country; it has been the cause of the closing of the Indian mints, and it is the keynote of the controversy raised by Mr. Wolcott's proposals, which is still ringing in our ears. No one who has paid any attention to Indian affairs can doubt that the Indian Government and the people of India, through their Government, have suffered serious inconvenience in consequence of having to pay a heavy gold debt out of a depreciated silver revenue, and that a stable par of exchange between India and Great Britain would on this account alone be of immense advantage to both countries.

77. Nor is this evil confined to the Indian Government and its subject ryots. Precisely the same sort of inconvenience is felt by all managers of enterprise in silver-using countries who have to remit the interest or principal of gold debts. The tea planter in India or the railway manager in Mexico feel the same kind of difficulty as the Indian Government. If his loan is a silver loan, the creditor must suffer, and of course exacts higher terms. If, as is commonly the case, the terms of the loan are for repayment in gold, the necessary adjustments in the silver country may take a long while and cause much suffering before they are completed; and it may well happen, and often does happen, especially if the management is nor honest or skilful, that the gold debt and interest are not paid in full. It is scarcely necessary to observe that precisely the same evil exists to a still greater extent in countries such as Argentina, which use forced paper. Nor is it necessary to dwell on the opportunities for fraud and dishonesty caused by this state of things. The evil is a very real and very great one.

IMPEDIMENT TO INVESTMENTS IN SILVER COUNTRIES.

78. The fourth evil, which is, in fact, a consequence of the third, is the impediment to gold investments in silver-using countries which the fall in silver creates. If a producer in a silver-using country has to speculate not only on the silver price of the article he is producing but also on the uncertain relation of the silver price of his article to the gold capital which he invests, it makes his speculation so much the more risky. If the investor of a loan at a fixed rate of interest does not know what will be the value of silver when his interest or principle is repaid, he will either require exorbitant terms by way of insurance, or he will refuse to invest except on terms of being repaid in gold, which accordingly has been the common course. Even in this case he is not safe, because with such a fall in silver as has recently taken place he cannot be sure that his debtor will be able to perform his contract. But this evil, serious as it is, should not be exaggerated. During the recent depression investments in India and Mexico have probably not suffered much more than investments in Australia and the United States—not so much as investments in paper-using South America. Further, investments in tea planting, in cotton mills, in jute mills, have gone on rapidly in India in spite of the fall in silver; and the complaint of the Lancashire manufacturer that the fall in silver has given the Indian manufacturer a great advantage over him in producing for the Eastern markets has to be set against the allegation that the fall in silver has prevented investments in India; for to whatever extent the fall in silver has prevented investments in India, to that extent it has limited Indian competition.

Further, there is a distinction to be taken between

cases such as railways, where the receipts are in silver and have to be turned into gold before paying the investor, and cases such as tea planting, where the produce is exported, and is sold at once for gold. In the former case there is a difficulty and possible loss to the investor which do not occur in the latter, for silver rates and prices cannot be raised at once in proportion to the fall in silver, whilst the price of produce which is sold directly for gold is not affected by the fall of silver. Still, after making all these allowances and deductions, the evil in question is no doubt both real and serious.

The present state of the money market in India affords an apt illustration of the evil now under consideration. Money is cheap in London, but dear in India; and yet money does not go from London to relieve the stringency of the Indian money market. The reason alleged is that the gold value of the rupee is now high, and that it is at the same time uncertain whether that value will continue at its present rate. Consequently, persons in England are unwilling to remit money to India to be invested in rupees there when they are uncertain whether they will be able to remit it back to England without loss by exchange; and persons who have rupees in India are anxious to remit all they can to London at the present rate of exchange, fearing that if they do not do so they may have to remit hereafter at a loss.

It may be observed that the present stringency in the Indian money market has been attributed by some persons to the closing of the Indian mints, which, it is said, prevents persons in England from remitting silver to India to be there coined into rupees; but, if the explanation above given is correct, it is clear that the closing of the mints can have had little or nothing to do with the present stringency, for the uncertainty of

future exchange would be even greater if the mints were again freely opened to silver than it is under present arrangements. Indeed, the uncertainty of future exchange when the mints were open was one strong reason for closing them.

MEANS AND OPPORTUNITIES FOR UNNECESSARY OR ILLICIT PROFIT.

79. The books are full of the evils caused to business by the operations of the money-changers of old times, who, under the Bimetallic system then prevailing, were constantly in the habit of making a profit by exporting any coins which were more valuable abroad than at home; and this business often took the form of actually sweating or clipping the coins. There was no doubt a good as well as a bad side to it, since by it the value of the precious metals was kept in a tolerably steady relation throughout the world; and some of the abuse lavished upon it was due to the prevailing error that the wealth of a country consisted in the quantity of gold and silver which it possessed, so that to export them was a sort of treason. But there was truth in the criticism that a business of this kind was not an essential part of legitimate commerce, and that though money-changers may have been at the time necessary agents for the conduct of trade, the profits made by them were often excessive, and were an unnecessary burden on trade.

What was true in former days of the dealers in gold and silver is now true of the dealers in nominal exchange: they are under present circumstances a necessity; but they have to make their profits, and those profits have to be deducted from the other profits of trade and manufacture. It would be a gain to the

world if the necessity for such profits could be abolished or reduced. Moreover, the dealings in nominal exchange offer temptations and opportunities for gain of a less legitimate kind; and where the persons engaged in these speculations have any control over the currency, the position may lead to operations of as nefarious a kind as those which were formerly carried on by the clippers and sweaters of gold and silver coins. It cannot be denied that a relation between two currencies which increases the necessity and opportunity for business of this kind is a burden and an evil which it would be well to remove.

CONFUSION BETWEEN REAL AND NOMINAL EXCHANGE.

80. It is unnecessary for me to dwell on this head, for my whole paper is a statement and an illustration of it. If exchange between this country and Australia, where the standard of value in both countries is the gold sovereign, were to rise or fall, every one would know at once that this was due not to currency but to some alteration in the real commercial relations of the two countries; for instance, to increased imports from Australia, to increased indebtedness on the part of Australia, or to some other of the important items which really make up the balance of international accounts; and no one would think of attempting to set that balance straight by tampering with currencies. But in the case of India it is very different. No one knows how far the actual state of the exchanges between the gold sovereign and the silver rupee is, or rather was, due to the balance of real trade between the two countries, or to a change in the relations between the gold sovereign and the silver rupee. Many of the fallacies which I

have been controverting in this paper arise from the fact that people attribute to the relations between gold and silver functions which are really due to far more important factors, such as competition, climate, &c. &c., and think to change the substantial relations between the two countries by altering the relations between gold and silver. The state of present controversy concerning the Indian mints affords an apt illustration. The exchange value of the rupee has risen since the closing of the mints, and still remains much higher than it was before that event; but there is at this moment a dispute whether the rise will be maintained, and how far the present rate of exchange is due to the restriction of the currency on the one hand, or to the cessation of drafts upon India in the form of Council Bills on the other; a dispute which makes the choice of action with respect to a future standard of value more difficult than it would otherwise be. Such disputes and difficulties could not exist if both countries had one standard value, and consequently a stable par of exchange.

CONCLUSIONS.

81. On the whole we may conclude:—

(1) That fluctuations between gold and silver are an impediment to trade, and cast some burden upon it.

(2) That whilst a fall in silver may possibly give a momentary advantage to the capitalist exporter from silver-using countries, it does so, if at all, at the expense of the people of those countries: and that to speak of the fall in silver as giving a permanent bounty to the producers in silver-using countries to the injury of competitors in gold-using countries is untrue and misleading.

(3) That the fall in silver does make it more difficult for silver-using countries to pay their debts, as is obvious from the serious case of India.

(4) That it does offer some impediment to gold investments in silver-using countries.

(5) That it does afford opportunities for speculation, sometimes of an illicit kind.

(6) That it is the cause of much confusion of thought.

To these conclusions may be added :—

(7) That all these evils are still more serious in the case of countries which use forced paper.

(8) That these mischiefs and inconveniences, great as they are, are such as have always been experienced where different standards of value are concerned—*e.g.* in the case of debased currencies ; in the case of early Bimetallism ; and in the case of forced paper—and that trade has been and is being developed in spite of them.

82. If I were to attempt to sum up in a few words the practical lessons to be drawn from the above considerations, I should conclude—

First, that some of the evils above referred to have been much exaggerated by Bimetallists, and that the mischief arising from the fall in silver is not so grave as to justify hasty and ill-considered measures, much less to call for an abandonment of our present intelligible and well-proved gold Monometallic system in favour of the shadowy and uncertain phantom presented to us by the New Bimetallists.

Secondly, that notwithstanding the exaggerations of Bimetallists, some real evils have arisen from the fall of silver, and that it is desirable that there should be throughout the world, and especially throughout the British Empire, a stable par of exchange, founded on one sound and honest standard of value.

HAS THE GOLD STANDARD

MADE

RICH MEN RICHER

AND

INDUSTRIOUS MEN POORER?

VII

HAS THE GOLD STANDARD MADE RICH MEN RICHER AND INDUSTRIOUS MEN POORER?

Written for the Gold Standard Association, 1897.

1. It is the commonplace of Bimetallists that the Demonetisation of Silver (as they call it) has enriched the creditor at the expense of the debtor; the banker and financier at the expense of the agriculturist and the manufacturer; Capital at the expense of Labour; the drones of society at the expense of the working bees.

2. For instance, the following are extracts from English Bimetallist leaflets:—

"REASONS WHY WORKING MEN SHOULD SUPPORT BIMETALLISM.

"Because the restrictions put upon the employment of silver as money have considerably increased the exchangeable value of gold, thereby augmenting the burden of Imperial and local taxation, ground-rents, royalties, and conventional and customary charges upon the industrial classes, causing great loss to those who live by industry, and bringing unfair gain to those who live upon it, such as the bond-holding and pensioned classes.

"BIMETALLISM AND JUSTICE TO THE INDUSTRIOUS.

"THE CRUELTY OF THE SINGLE GOLD STANDARD.

"Our National Debt in 1842 was	£839,000,000
"In 52 years we paid off	175,000,000
"Leaving, in 1894	£664,000,000

"But in consequence of the increased value of gold the burden of the debt to-day is heavier than it was in 1842, although in the meantime we have paid off such a large sum to the national creditors.

"Gold prices of commodities have fallen so much that fifty per cent. more commodities must be given to pay the present gold debt, or £996,000,000 at the rate of the former purchasing power of gold.

"The true test of a measure of value like gold is what it will procure in commodities; how much wheat, cotton, coal or iron you must give in exchange for a given quantity of it.

"Tested in this way, the English people must give £332,000,000 worth more of their commodities to pay off their present National Debt than they need have given in 1842, although in the meantime they have paid off £175,000,000.

"The Australian gold debt is stated at £200,000,000, but measured in commodities it is now equal to £300,000,000 if compared with the prices current twenty years ago.

"The Indian gold debt is £107,000,000, but that means at the present rate of gold £160,000,000 worth of commodities, if compared with the prices current twenty years ago.

"Is this fair to the industrious workers? Think what this increase of obligations means in human endeavours and human labour! How many human beings must earn this extra tribute to be paid to non-producers by the sweat of their brows!

"This is the cruelty of an appreciating standard, and the injustice of it.

"The value of the mortgages on human labour have been increased by fifty per cent. because governments have refused to allow the legal use of the Bimetallic standard which was the measure of human labour when these debts were incurred."

3. We have all of us heard enough, and more than enough, of Mr. Bryan's Cross of Gold. And in a pamphlet which has just been sent me by M. Allard,[1] who holds a respectable position in Belgium—a pamphlet which begins with Atheism and Judaism, and ends with "The Rt. Hon. W. Lidderdale"; a pamphlet which attacks Monometallism with a ferocity and extravagance happily unknown to most English Bimetallists—I find the following passage concluding the so-called Demonetisation of Silver:—

"Fidèles à ce devoir—le devoir de conserver et augmenter leur fortune—les financiers de notre siècle ont trouvé un moyen inconnu

[1] *Democratie Rurale*, par Alphonse Allard. Brussels, 1897.

jusqu'ici d'augmenter leur richesses, ils se sont adressés aux monnaies, ils les ont faussées, à l'instance des anciens rois, Philippe le Bel et autres, de funeste mémoire !

"Nous allons voir comment :

"On s'est dit, vers 1850, qu'il serait facile de produire des baisses de prix, si l'on pouvait décider les gouvernements à rejeter de la circulation monétaire l'un des deux métaux précieux, soit l'*or*, soit l'*argent*; tous les capitalistes qui ont des intérêts à recevoir en métal en profiteraient, puisque le métal restant serait plus rare et monterait en valeur, qu'il leur procurerait ainsi plus de jouissances qu'autrefois ; cette falsification des monnaies était digne des anciens Juifs et de Philippe le Bel, nos financiers modernes entendent bien ne leur céder en rien."

Here not only is it alleged that the effect of closing the French and German mints to silver has been to rob debtors ; but that it was the intention of the statesmen and financiers who carried those measures that it should have that effect. This surpasses most perversions of history, even those made by Bimetallists.

4. But I am not sure that it is essentially stronger than the following passages in a letter from Professor Foxwell, read at a Bimetallist meeting at Manchester on the 12th October, 1897. In this letter the Professor, whilst pouring unmeasured praise on the Managers of the Bank of England for their recent silly action about silver, denounces in equally unmeasured terms the whole banking community of London. He says of them :

"Lombard Street represents, or, as I think, misrepresents, the interest of the creditor."

And again—

"There is only one thread of consistency to be found in the action of the monometallist bankers. Now, as often before in English history, their aim is to aggrandise the creditor by increasing the real value of the money in which his debt is expressed."

Such charges as these ought not to be made, especially by persons holding responsible positions, against the statesmen and financiers of France and the banking community of London without sound and serious reasons. Let us proceed to inquire what the reasons are.

5. *The most important point in the above quotations is the charge that the changes in currency effected by what is called the Demonetisation of Silver have materially altered the relative positions of debtor and creditor to the injury of the debtor and the gain of the creditor. I propose therefore to deal with this point in the first instance, and afterwards to consider the bearing of the argument on the general relations between rich and poor.*

6. The charge that the so-called Demonetisation of Silver has injured debtors and benefited creditors is founded on the well-known economic doctrine that an alteration in the value of the standard metal alters all contracts made in terms of that standard. In this country gold is the standard metal, and all contracts are made in terms of gold sovereigns. If, therefore, after a contract is made, the gold contained in a sovereign becomes more valuable, and if in consequence all prices fall, the debtor, who has contracted to repay a certain number of sovereigns, has to repay in goods more than he received, and *vice versa*. But here we must be on our guard against a prevalent error. A fall in price may be due either to the comparative scarcity of the gold in a sovereign or to the comparative abundance of the article exchanged for a sovereign. If it is due to the former cause, the debtor is undoubtedly injured by the change; if it is due to the latter cause he is not injured, because if he has to pay back more articles than he received, he has

more articles with which to pay. Having regard to these principles let us now consider the facts of our case.

7. When asked for the real explanation of some extraordinary statement, it is wise to ask whether the statement is true. The statement in the present case is, that since the so-called Demonetisation of Silver, creditors have been enriched, and that they have been so enriched at the expense of debtors. Before going into the question of "How" and "Why," we shall do well to inquire whether it is the fact that they have been so enriched—in other words, whether it is the fact that a man who is repaid, say, in 1896 or 1897, a sum of money which he borrowed in 1870, gets back in actual value more than he lent.

8. Let us take a simple case. Let us suppose that one of these much abused financiers possessed in 1870 a sum of gold coins, or an amount at a bank, which he could have converted into gold coins, and let us suppose that the same man has at his command the same sum in 1897. Is he a richer man than he was? For our present purpose it does not signify what he has done with the money in the interval. He may have locked it up, or he may have lent it, or have otherwise invested it. The material point is to compare the real values to him of a given number of gold sovereigns in 1870, and in 1896 or 1897. Nor does it much matter what sum we take, provided it be sufficient to bring him within the class of "bloated capitalists" and "intriguing financiers," of whom we hear so much. It may be £1,000,000, or £100,000, or £10,000. Let us take £100,000, and ascertain whether the possessor can get more out of £100,000 in 1897 than he could have done in 1870.

9. This question is commonly settled in a very

summary fashion by an appeal to Mr. Sauerbeck's figures, which, valuable and useful as they are when properly used and applied, are made to do a great deal of duty for which they are quite inadequate. The argument founded on them may be stated as follows:—"The wholesale prices of a certain number of articles of general consumption and commerce have fallen heavily in the largest consuming market—so heavily that the average, or, as it is called, the index number, which was 100 in the decade ending 1877, is little more than 60 in 1896, a fall of 40 per cent. Therefore all prices have fallen; therefore 100,000 gold sovereigns will buy 40 per cent. more of everything than it would have bought in 1870; and therefore, of course, our crafty financier is 40 per cent. richer than he was in 1870."

10. Charming reasoning, indeed! I pass over, for the moment, the question whether Mr. Sauerbeck's articles are well chosen; I pass over the fact that his prices are taken in one great market and at the place of consumption, not that of production; I pass over the question whether averages and index numbers in such a case are not delusive, and whether the fact that some important articles in his list have actually risen in price, and that those which have fallen have fallen most unequally, does not point to special causes which affect each article, rather than to an increased demand for gold which ought to affect all equally. I pass over, I say, considerations such as these, in order to point out that Mr. Sauerbeck's list does not pretend to include, first, any retail prices; secondly, any prices of ships or of shares, or of land, or of houses, or of any of the different forms of saleable property which are attached to land, and all of which are just as much sold for gold as any articles in his list; thirdly, which is the most

important omission of all, any prices of labour, or of human services of any kind, from the salary of the prima donna to the earnings of the costermonger or of the street sweeper—all of which are gold prices, and ought to be affected by the value of gold just as much as the prices of corn, of meat, of cotton, or of iron. And yet Mr. Sauerbeck's figures are quoted by Bimetallists, and even by economists and statesmen, as if they were an epitome of all human dealings, and an infallible key to the infinite mysteries of price. Poor Mr. Sauerbeck! It makes me shudder to think what he has been made answerable for.

11. Let us now—duly using but not abusing Mr. Sauerbeck—consider carefully what our bloated financier could have done with his hundred thousand gold sovereigns in 1870, and what he can do with them in 1896 or 1897.

12. He may wish to spend his money on perishable commodities. In that case he may undoubtedly buy more wheat, more bread, more meat, more cheese, more tea, more sugar, more cotton, more iron, more common clothes, and so on through the articles which make up the lowered prices in Mr. Sauerbeck's list, than he could have bought in 1870. But would he ever do so? What can he do with them? He cannot himself or by his family, or his household servants consume more than a very moderate quantity of such articles, and any small saving on such consumption which he may make by their reduced price will be far less than the increase of money wages he has to pay to his servants in 1897.

13. Or he may wish to spend money on expensive luxuries—on good pictures, on good wines, on handsome clothes, on jewels, and all the paraphernalia of luxurious modern life. All or almost all of these

things he will find cost more now than they did in 1870.

Or he may wish to keep carriages, and carriage horses, hunters, race-horses. All these he will find dearer than in 1870, and though the forage they consume may be cheaper, the whole cost of keeping them, and of paying the servants and grooms who tend them, will also be greater.

Or he may wish to buy a beautiful house in the best part of London, or a really desirable country residence, or a deer forest or grouse moor and excellent shootings. For all these he will have to pay at least as much as, and probably much more, than he would have paid in 1870.

Or he may wish to build a handsome house. This, he will find, will cost him 20 per cent. more in pounds sterling than it did in 1870.

Or he may wish to have a charming garden with hothouses and conservatories; with flowers, shrubberies, and plantations, such as make so many Paradises in this beautiful country of ours. The cost to him of these will depend on the cost of labour, much of it skilled labour, and this he will find costs more than it did in 1870.

14. Or he may wish to give his children the best possible education. Here he will find that public schools and universities, good tutors and governesses, cost as much as and even more than they did in 1870. If the new schools for girls enable him to give them a good education more cheaply than 1870, it is not from any general fall in prices, but because such schools have only been created and organised in recent years.

15. Or he may wish to employ his £100,000 in some business which will give him a return for his money—in agriculture, in manufacture, in shipping, or in trade. Here he will find that his chief outlay is in

labour and in services; in the hand that works, or in the brain that manages and superintends; and for such hands and such brains he will have to pay more gold sovereigns than he would have paid in 1870. Labour has no doubt become more productive in cases where its efficiency has been increased by improvements in machinery; but though the output may have been increased, the capitalist gets a smaller share of the net product in 1897 than he did in 1870.

16. Or, finally, he may wish to re-invest his £100,000 on some good security. In that case he will find that whilst he could have got five or four and a half per cent. for his money in 1870, he can only get three and a half or three for it now. It would be easy to bring figures to prove this, but it is not necessary. It is notorious that the rate of interest on capital is much lower than it was.

17. In short, there is no use, or hardly any use, to which our rich man can put his 100,000 gold sovereigns which will not cost him more, or bring him in a smaller return in 1895–1897 than in 1870. Is it not, therefore, the very height of absurdity to quote Mr. Sauerbeck's figures and to say that because corn, cotton, and iron are cheaper, a man who lent £100,000 in 1870 and receives it back in 1897 is richer now than he was then?

18. But there is another side to the picture; another end of the scale. We have hitherto spoken of the financier or large investor, because he is the object of such attacks as those quoted from M. Allard and Professor Foxwell. But investment is fortunately not confined to large capitalists. Through the medium of joint stock enterprises, of insurance companies, and of savings banks, the savings of people of all classes, of the professional classes, of the lower middle classes

and of the labouring classes, find their way into the investment market, and these sums vary indefinitely in amount. Let us take an investment at the lower end of the scale—say of £100, the investment it may be of a mechanic, or of a poor clerk, or of a domestic servant, put aside to form a support in old age as a small provision for widow or orphan children. How will the owner of such a sum of gold stand in 1897 as compared with 1870? If he wishes to re-invest, or even to keep it invested, he will, like the richer investor, lose something in interest. Instead of, say, five per cent. or four and a half per cent., he will have to put up with three and a half or three or even two and a half per cent. But suppose he wishes to spend the money, how will he stand? His outlay is very unlike that of the rich man. Of the things which he uses, house-rent alone has increased since 1870. The education of his children is provided for him at the public expense. The rest of his outlay is upon those articles comprised in Mr. Sauerbeck's list which have fallen most in value—upon bread and meat, upon tea and sugar, upon common clothing and common furniture. So that as regards all these things his £100 or the proceeds of it go a great deal farther than they did in 1870, and these things constitute by far the largest part of the objects of his expenditure. Upon them he will save considerably, probably from twenty to forty per cent. His £100 or the annual proceeds of it will then go much farther than they did in 1870. *In other words, if there are any creditors whom the loan or investment of a given sum in gold will make richer in* 1897 *than the same sum would have made them in* 1870, *it is not the wealthy capitalist, the banker, or the financier, but the worn-out workman, the destitute widow, and the orphans of the poor.* These are the

gold creditors who, according to M. Allard and our Bimetallic Professor, are fattening on prices lowered by the crusade against silver.

19. We have been hitherto considering the case of the creditor. Let us now consider the case of the debtor. So far as the wealthy creditor is concerned, we have seen that he has not been made richer by the fall in prices, and it is clear therefore that if the debtor has suffered it is not the wealthy creditor who has robbed him. But has he suffered at all, and if so, to what extent?

20. One remarkable feature of the period under consideration has been, as we have already seen, the fall in the rate of interest. Money can be borrowed now at a much lower rate than in 1870. Capital is more abundant and is seeking investment. Consequently in all cases in which there is no special undertaking not to pay off debt, the debtor can pay it off and re-borrow or can convert it so as to hold and enjoy his loan on much easier terms. This has, as we know, been done to an enormous extent both with public debts and private mortgages. The only cases in which it cannot be done are those in which there is a fixed irredeemable annual charge, and these are few compared with the vast bulk of debts, public and private. The fund holder or public creditor is a favourite object of attack with persons such as M. Allard, and the public debtor, or, in other words, the tax-paying public, is an object of their commiseration. But we all know how the burden of our own debt has been lightened by conversion; and he would be a bold man who could assert that its burden is felt by the mass of the people to be greater than it was thirty years ago. What is true of the public debt is also true of the great majority of mortgages and debenture charges.

21. Take again the case of productive industries which are carried on with borrowed money. In these cases it is said that the fall in prices, whilst it benefits the creditor, necessarily injures the debtor, because, whilst his outgoings remain, his incomings from what he sells decrease. But this is not the case; or if it is the case, is so to a limited extent only. How far the creditor has benefited we have seen above. But the debtor too reaps his advantages from the fall in prices. His raw materials and implements are cheaper; improvements in manufacture and transport enable him to produce an equal quantity of goods at smaller cost; and the lowered price of his products encourages and increases consumption. If he loses in the price of his products he gains in other ways. So far as he may have subjected himself to permanent charges which he cannot pay off or reduce, he may suffer, but not so much on account of falling prices, as because he cannot take advantage of the lower rate of interest which now prevails.

22. There is, however, one item, and an important one, in which his outgoings may and often have increased, viz., the item of wages, which have increased in normal, and much more in real amount. Even against this there has to be set the greater productiveness of labour arising from improvements in processes and in machinery. *And if after balancing these items the manufacturers' profits are now less than they were, it is due to the fact that labour gets a larger share of the products of industry than it did in* 1870.

23. Finally, let us consider the case of the landowner, the most crucial case of all, and a case in which there is no doubt a large class of debtors who at the present time are worse off—often much worse off—than they were in 1870. Even here we must not

exaggerate. The class in question are the owners of agricultural land, and there is a large proportion of the land of Great Britain which is not agricultural. The owner of land in and near towns has not suffered at all; if he has fixed burdens his rents have increased in a much greater proportion. The agricultural land-owner has no doubt suffered heavily from lowered prices for agricultural produce. As regards mortgages, the interest he has to pay has in most cases been reduced. But there are many charges, such as jointures, annuities, rates, etc., which cannot be reduced, whilst his rents are largely reduced.

Again, the farmer—if he happens to have fixed charges—may have suffered in like manner; but he ultimately finds relief in the reduction of rent.

24. Let us admit, however, that the debtor who depends on agriculture is, in consequence of the fall in the prices of agricultural produce, worse off than he was in 1870. Is this due to currency? Surely there are two obvious causes which sufficiently account for this fall without bringing in the imaginary scarcity of the pound sterling. *The first cause is the increase of foreign competition caused by improvements in transport, which bring the produce of newer and more productive lands to our shores at a much lower cost. The other is the notorious fact that the agricultural labourer receives out of the aggregate produce of the land a much larger proportionate share than before.* His nominal wages have not fallen, or have fallen very little; whilst his real wages, or what he buys with them—his food, clothing, necessaries—have largely increased and improved.

25. It is said that before 1870 the money produce of agricultural land might be divided into three equal shares: one for the landowner, one for the farmer, and

one for the labourers. Assuming this to be true, it follows that the loss caused by the fall in agricultural prices is no longer shared as before. The general demand for labour enables the labourer to exact an increased share of the whole produce and whatever reduction there may be in it in consequence of the fall in prices falls wholly on the employer. The labourer's gain is the landowner's loss.[1]

26. To sum up the case of the debtor—is it true that the man who owed a given number of pounds sterling in 1870, and who owes the same sum now, is worse off, in consequence of the fall in prices, than he was? The answer is no, with two exceptions, viz. the case of a debtor subject to a fixed annual charge which cannot be reduced, and the case of the agricultural landowner or farmer, for both of which there are special reasons unconnected with currency. Where the debtor is an employer of labour, whether of agricultural labour or of other kinds of labour, the labourer gets now a larger share of the aggregate product than he did at the earlier date.

27. We have hitherto been considering the effect of the alleged fall in prices on the relative position of different classes, considered as creditors on the one hand and as debtors on the other; since it is on the supposed increase in the burden of debt, consequent on a fall in prices, that the Bimetallists are so fond of insisting; and we have found that *whilst such a change in their relative positions as has taken place is very different from that which Bimetallists have imagined, such change as has taken place is due to causes other than currency.*

[1] See Mr. Little's report, Appendix to *Final Report on Commission on Labour*, pp. 204–217; see also the paper in this series, No. 28, entitled "The Bimetallic Report of the Agricultural Commission," by the Right Hon. G. Shaw-Lefevre.

28. But the examination of this question, as it affects creditors and debtors, does point to more general conclusions of very great interest concerning the changes which have taken place in the relative conditions of different classes and interests of rich and poor, of capital and industry, of interest and wages. Let us continue the inquiry by eliminating all question of debtor and creditor, and let us consider only the relative position of different classes of society at the two periods—1870 and 1890–97. Let us compare incomes of different amounts at the two periods, from whatever source derived, whether from investments, or from trades or professions, or from services or from labour, and consider what are the relative positions of persons enjoying large incomes and persons possessing small incomes or earnings at the two periods in question. In order to do this it will not be necessary to repeat what has been already said about incomes from invested capital, since they have been dealt with; or about expenditure, since what has been said about the expenditure of rich and poor applies equally to all expenditures, whatever be the nature of the income out of which it is paid. We only need to add in a few words what are the salient facts concerning incomes derived from sources other than invested capital; viz., trade and business incomes, professional incomes, salaries and wages—in other words, concerning the prices given for services and labour at the two periods in question.

29. First of all then as regards the incomes of the richer classes which are derived from services of any kind—from business, from professions, and from salaried places. On this subject there are no general statistics which I can quote with confidence. But common experience teaches us, I think, that payments for services rendered have not diminished in the last

twenty-five years. The remuneration of the manager, of the lawyer, of the medical man, of the artist, has not diminished; and the salaries of clerks, especially of the lower and more numerous classes of clerks, have notoriously increased.

30. As regards the prices of weekly paid labour, or wages, there can be no doubt that they increased very largely between 1870 and 1891.[1] Of the general fact there can be no doubt. It is difficult to give the result in a few figures, but it may be mentioned that the careful inquiry made in the article referred to below, gives the average annual wages per man as £43 4s. in 1870, and £53 8s. in 1891. Corrected by Mr. Sauerbeck's figures, so as to show the effect of the cheapening of the articles which the labourer consumes on the real value of his earnings, the figures would be 130 for 1870, as against 202 for 1891.

31. It appears, therefore, (1) that the money prices of all human services have increased since 1870; (2) that the money prices of those forms of service which are paid by weekly wages have probably increased more than the prices of more highly paid services; (3) that the real wages of the lower forms of service, *i.e.* what is commonly called labour, have increased much more than the nominal wages.

Comparing the more highly paid forms of service with the less highly paid, the real value of the wages of the less highly paid has increased much more than the real value of the salaries of the more highly paid,

[1] See an article by A. L. Bowley on the change of wages in the United Kingdom between 1861 and 1891, in the *Journal of the Statistical Society*, for June, 1895, and the various authorities there quoted, who, though they may differ in details, agree in general conclusions. See also evidence given to Agricultural Commission and the paper in this series, No. 28, entitled "The Bimetallic Report of the Agricultural Commission," by the Right Hon. G. Shaw-Lefevre.

because a much larger proportion of their income is spent on articles which have fallen heavily in price.

32. We are now in a position to compare the position in 1870 and 1891–1897 respectively, of persons with large incomes and of persons with small incomes from whatever source they may be derived. Let us take for the comparison a rich man enjoying, say, an income of £10,000 a year, and a poor man earning his livelihood by weekly wages.

33. First then as regards income. *The nominal income of the rich man will have diminished if it depends on invested capital, because the interest on capital has fallen; the nominal income of the poor man has certainly risen.*

When we turn to expenditure, the income of the rich man goes less far than it did, because the prices which have fallen are prices of things of which he consumes only a moderate quantity, whilst the prices of what he requires, viz. of luxuries and of human services, have increased. The income of the poorer man goes farther than it did, because the things of which the prices have fallen are things which constitute by far the greatest part of his consumption.

34. *So far, therefore, from its being the fact that the last twenty-five or thirty years has favoured the bloated capitalist at the expense of industry, the drone at the expense of the worker, the men of large property at the expense of those who depend on their hands or their brains for subsistence, the exact opposite is the case. The rich have not been made richer or the poor poorer, but the contrary.*

35. There is one exception—the case of the agricultural landowner. As a capitalist he shares in the lowered value of his capital with other capitalists, but as a producer he suffers exceptionally because in

consequence of foreign competition the price of his produce has fallen exceptionally, and because he still has to pay as much for labour as before.

36. If these are the real features of the situation, is it not in the highest degree absurd to treat the fall of prices as an unmixed evil, to attribute that fall to currency, and to suppose that it is either desirable or possible, by adding to the number of counters in circulation, to raise prices and to reverse the current of industrial progress? If the changes which have happened were changes due to a want of currency they would affect all prices equally, which has not been the case; and if all prices were now to be simultaneously raised by adding to currency every one's relative position would remain as before. But it is clear that the changes which have taken place are not due to currency, but to factors of a very different kind, which have altered and which, we may hope, will continue to alter the relative position of different classes. These factors may be stated as follows:—

1. Improvements in production and transport, which have lowered prices, especially of those things which form a large proportion of the consumption of the poorer classes.
2. Foreign competition, which, taking advantage of improved transport, has specially reduced the price of agricultural products.
3. Increase of capital and consequently of demand for labour, which has either increased the nominal wages of labour or has prevented them from falling.

The results are a better distribution of wealth and a higher remuneration to labour, results for which we cannot be too thankful.

There is one class, viz. agricultural producers, who

really suffer actual loss. But of this loss, some falls on the farmer, still more on the land-owner, and little or none on the labourer.

37. Recurring to the question with which we began, we find:

1. That it is not the fact that debtors as a class have become richer at the expense of creditors.
2. That it is not the fact that the rich have become richer and the poor poorer.
3. That it is not the fact that idle capital is increasing its gains at the cost of industry.
4. That during the period in question the prices of the necessaries of life have fallen, whilst the prices of human services, and especially the prices of labour, have risen, the effect of which is to make the rich poorer and the poor richer, because human services are what the rich man requires and the necessaries of life are what the poor man consumes.

38. In conclusion, let us consider what bearing these facts have on our standard of value. All sensible men desire a standard of value which shall be as stable as possible in respect of all the different things which it is employed to measure. The foregoing considerations show that when all prices are taken into account, there is nothing whatever in the recent history of prices to show that our present standard of value is unstable. Again, the foregoing considerations also show that the changes which have taken place in the prices of the necessaries of life and of human services, have been changes for the better in the general conditions of society. If, under these circumstances, we were, at the bidding of persons like M. Allard and Professor Foxwell, to depreciate our standard of value, we should be taking a step which is wholly uncalled for. But we

should be doing something more and something worse. *We should in all probability check or reverse the wholesome process which is now going on; and, we should, for a time at any rate, by causing prices to rise more and to rise faster than wages, increase the profits of capital and diminish the remuneration of human services and labour.*

THE

WEAKNESS OF BIMETALLISM,

AND THE

FOLLY OF A CONFERENCE

VIII

THE WEAKNESS OF BIMETALLISM, AND THE FOLLY OF A CONFERENCE

Written for the Gold Standard Association, 1895

1. In face of a General Election it would be idle to explain at length the true principles of currency or the fallacies of Bimetallic theory. But *it is desirable to place before candidates and voters some plain considerations* which affect the present phase of the currency question, and to draw attention to some points of immediate importance.

2. It is the more easy to do this, since the Bimetallists have in their recent Memorial to the Chancellor of the Exchequer themselves limited the field of discussion. Being unable or unwilling to state what they think should be the future fixed ratio between Gold and Silver, they do not in the Memorial even mention that ratio as part of their programme. They do not advocate what has hitherto been known as Bimetallism. The objects they profess to have in view are "a fixed par of exchange between the metals," and "a more stable standard of value than we possess at present;" they suggest no specific measures for attaining these objects, and their only

proposal is to throw the whole subject into the crucible of an International Conference, in which other countries, with other interests, will have as potent a voice as our own, and in which, so far as the Bimetallists are concerned, our representatives will have no instructions as to the course which they are to follow.

3. Such stability in the standard of value and such steadiness of exchange as the conditions of trade allow, are of course desirable objects. But there is nothing more likely to affect them prejudicially than rash and ill-advised attempts to palter with the present Gold Standard. *Any alteration of an existing standard of value is itself at all times a great evil*, and ought only to be adopted under the most pressing circumstances and with a clear view of probable consequences. It therefore rests with those who propose a Conference for the purpose of altering the standard of value, to show not only in what respect our present standard is defective, and what are the evils which it causes, but also to embody in specific proposals the alterations which they would make and to show in what manner those alterations would work.

4. In support of their case the Bimetallists make certain vague allegations concerning the commerce and industries of the country, and attribute what they are pleased to call the depressed state of those industries to recent monetary changes, coupled with alleged defects in our Gold Standard. It might be sufficient to make the general reply that the evils alleged by the Bimetallists are, to say the least, much exaggerated, and that so far as they exist they are accounted for by causes wholly apart from currency. But some of these alleged evils deserve special notice.

5. Amongst the chief of them are low prices.

Now, *low prices are not necessarily an unmixed evil;* on the contrary, the low prices of necessaries of life are a great advantage to the general mass of the people. Nor is there any reason for thinking that the present low prices are due to currency causes. On the contrary, there are ample reasons to account for them in the improvement of the arts of production; in the extension of facilities for transport; in the development of the machinery of exchange, and in the competition of new races and of new countries in the processes of agriculture and of manufacture. With all these changes, with an unprecedented application of human skill and ingenuity to the arts of production, transport and exchange, and with labour rendered more and more efficient, the fall which has taken place in the gold price of commodities is exactly the result we should expect, and so far from justifying an attack on our standard of value, is, *pro tanto*, a reason for believing that it has done its duty.

6. To deal completely with the mischiefs alleged in the memorial of the Bimetallists would require a detailed account of the state of this country during the last three or four decades, of its trade, of its profits, of the remuneration of its labour, of its pauperism, and of the state of its people generally. To do this at length is impossible, and reference can only be made here to the many well-known reports and statistics on this subject. Generally speaking, it may be stated that whilst, for obvious reasons unconnected with currency, English agriculture is depressed, and whilst, in consequence of the Baring crisis and other well-known causes, a boom in commercial profits has been followed by the usual reaction, yet the quantity of production and of trade has been maintained, and progress has on the whole been made. The following

figures illustrate the state of the country before and since the alleged demonetisation of silver.

GENERAL STATISTICS.

Year.	Population, in millions.	Income Tax Assessment, in millions.	No. of Scholars in Elementary Schools, in thousands.	Crime—Number of Convictions, in thousands.	Tonnage—Foreign Trade of U.K. in millions
1870	31·3	£419	1,454	18·4	36·6
1890	37·5	£632	4,236	12·3	74·3

STATISTICS MORE SPECIALLY RELATING TO LABOUR

Year.	Proportion of Paupers to each Thousand of Population.	Number of Paupers, in thousands.	Savings Banks Deposits, in millions of £s.	Consumption of Tea per head, in lbs.	Consumption of Sugar per head, in lbs.
1870	46·5	1,279	53·1	3·8	47·2
1890	27·3	990	111·3	5·2	73·2

7. As regards Labour, it is clear from the above statistics of pauperism and of consumption that since the alleged demonetisation of silver, there has been no increased lack of employment or diminution of comfort. The evidence of the best statisticians, as given in the reports to the Labour Commission, show that nominal wages from 1870 to 1890, even of agricultural labourers, rose rather than fell, whilst the real wages of the labourer, due to the increased cheapness of all necessaries of life, rose much more. On the whole the labouring classes are undoubtedly far better off than they were before the fall in silver began. A proof of this has been furnished by a recent careful investigation under the auspices of the Statistical Society. According to that investigation *the annual average money wages of manual labourers in this country increased from £43 8s. 0d. in* 1870 *to* £53 16*s.* 0*d.* in 1891, while the purchasing power of wages, calculated according to Sauerbeck's Table of prices of commodities, increased much more—that is, from 116 in 1870 to 192 in 1891.

8. Scarcity of gold is a favourite subject with Bimetallists. Their argument is, that because we pay

for our goods in gold sovereigns, there is, with increasing trade and increasing population, a constantly increasing demand for sovereigns with which to pay, and that consequently, if gold does not continue to increase at some ratio corresponding to population, or to the production of goods, gold must become dearer and prices must fall. This, they say, happened when silver was, as they say, demonetised—1870–1874—and when in consequence, according to them, an additional burden was laid on gold. The conclusion they draw is that we must increase the quantity of the standard metal by adding silver to gold. In this argument they altogether overlook the fact that we do not actually pay in gold. We pay for what we buy, not in gold sovereigns, but in promises to pay gold sovereigns, and these promises are scarcely ever performed by actual payment of gold sovereigns. The gold sovereign is always the Standard of Value, but is now very seldom the actual medium of exchange. There is, therefore, no such demand for gold as alleged by Bimetallists.

9. But putting aside this important consideration, *let us see how the truth stands about the actual supplies of gold.* The aggregate new supplies of gold in successive periods have been as follow :—

1493 to 1800 (300 years) . . .	£500,000,000
1800 to 1840 (40 years) . . .	87,000,000
1840 to 1870 (30 years) . . .	600,000,000
1870 to 1893 (23 years) . . .	550,000,000

Gold is not consumed like bread or cotton—it accumulates. Consequently the increase in the world's stock of gold during the last half-century has been enormous, amounting since 1840 to nearly £1,200,000,000, and we now know that the output of

1894 is the largest on record.[1] Against this enormously-increased supply, what is the increased currency demand in consequence of the alleged demonetisation of silver, and the adoption of a gold standard by France and other nations, which, as Bimetallists say, increased the value of gold and lowered prices? Estimates vary, but the lowest estimate is 120 millions and the highest 200 millions. It is scarcely necessary to add to this the notorious fact that the banks and treasuries of the world are overflowing with gold, in order to show how absurd is the argument founded on a scarcity of gold. In fact, there is a plethora of that metal.

10. Under such circumstances it is out of the question to attribute low prices to scarcity of gold. Whether adding silver to gold, and thus increasing the quantity of the standard metal, would have the desired effect of raising prices, as the Bimetallists desire, may be doubted. But let us assume for the moment with them that it would do so. *What would be the effect on the working classes? It would at once increase the price of all the necessaries of life, and would thus rob labour.* The Bimetallists allege that low prices discourage enterprise, prevent the employment of labour, and thus injure the labourer; and they propose to remedy this evil by increasing the number of counters in which prices and wages are reckoned. Now it may be conceded to the Bimetallists that if prices rise by reason of an increase in demand, more things are wanted, more industrial enterprises are started, there is an increased demand for labour, and in consequence a rise in wages. But if a rise in prices

[1] The additions to the stock go on increasing. For 1894–1897 (4 years) they were about £170,000,000 and for 1898 they are estimated at £58,000,000.

is brought about, not by increased demand, but by doubling the number of counters in which prices are reckoned, in other words by calling a sixpence a shilling, the case is very different. Such an increase would cause no increase in demand, no additional production of goods, no improved demand for labour. It would cause a nominal shilling to be paid for every article where sixpence was paid before, and would raise the price of bread, of tea, of sugar, of clothes, of all the necessaries of life. In the course of time nominal wages would probably rise too, but as wages always respond to a change in currency much more slowly and much less effectively than prices, the workman would, for a long time, at any rate, receive little if anything more in the form of nominal wages, whilst he would have to pay much more for all he wants. *To depreciate the currency is to rob labour.*

11. Under the circumstances stated in the above paragraphs the case of the Bimetallists for an alteration of our currency or Standard of Value fails altogether. They abstain, indeed, as above stated, from recommending any specific alteration. But they desire to have an International Conference on the subject which has no meaning unless it is empowered to propose some such alteration. Now, an alteration in the Standard of Value is a very serious thing. Applied to future contracts it means confusion and difficulty—or something worse. Applied to existing contracts it means fraud and robbery. The Standard of Value, like other standards, is the measure and language in which all contracts are made.

12. The first thing, therefore, one would imagine, in consenting to such a Conference as now proposed, would be to know what is the alteration in the Standard of Value which we desire ourselves, and to

have *some definite plan and purpose. But the Bimetallists have none.* Under such circumstances a Conference would be idle, if it were not worse. A good illustration of the possible mischief of a Conference entered into under such conditions may be found in the recent Conference on the Rules of the Road at Sea. The present Rules were first framed when Mr. Milner Gibson was President of the Board of Trade. They were settled with great care by our own nautical authorities, they were then submitted to the French and other maritime nations, and after some discussion were unanimously adopted, and have on the whole worked extremely well. When in more recent years some additions or variations were needed, a different course was taken. The whole subject was remitted to an International Conference, composed of representatives of the different maritime nations, without specific instructions. There was no real conflict of interests, and the Conference, which was composed of very capable men, reported in favour of certain changes. But those changes, whether right or wrong, have not approved themselves to the classes of our own people who are most interested in them; their adoption is successfully resisted, and the result is confusion and difficulty with foreign nations. This is the natural result of going into a Conference without knowing what we want, even in a case where there is no real conflict of interests, but only a difference of opinion. But in the present case, is there no conflict of interests? Are we sure that other countries will see with our eyes? Are we sure that other countries may not have their own axes to grind? *And is it prudent to commit so serious a question as the maintenance of our Standard of Value to a Conference where we shall not be in a majority, and where we may at any time be out-voted or out-manœvred?*

13. We are, on the whole, a creditor country, and our debts are gold debts. It is the interest of our debtors to reduce the real amount of debts they owe us; and if they have silver to pay with, it is their interest to make their silver go farther in paying us than it does now. If so, are we to go blindfold into a Conference on the subject of the relative values to be attached to gold and silver, where it is our interest to maintain gold values, and where it may be the interest of other members of the Conference to reduce those values.

14. Again, we hold no large stock of silver and we do not produce silver. It is very different with other great countries. France, for instance, holds a stock of silver which for internal purposes is worth about £100,000,000, but for external purposes, *e.g.* trade with England, is worth only half that sum. The United States Government hold a stock of silver which for internal purposes is worth about £125,000,000, but which for external purposes, *e.g.* for payment of gold debts, is worth only about half that amount. If the value of silver could be raised by International Agreement from 30*d.* an ounce, which is about its present value, to 60*d.* an ounce, which was about its value under the old rates of $15\frac{1}{2}$ to 1, the value of these stocks of silver would, for the purpose of paying foreign debts, including debts due to England, be doubled.

15. Again, England has no silver mines such as exist in America and elsewhere. The silver production of the world is about 160 millions of ounces a year. This, at the value of 30*d.* an ounce, would be worth £20,000,000. At the price of 60*d.* an ounce it would be worth £40,000,000. To this enormous extent are the producers of silver in America and elsewhere interested

in raising the value of silver at the expense of their creditors and customers. *Is it desirable that with such interests as these at work England should commit herself blindly to a Conference which would be entrusted with the task of determining how much silver shall be given for an English sovereign?*

16. Conferences are valuable for the purpose of registering settled intentions: they may be useful for the purpose of arranging details. Conferences, however, are often only the resource of weak men who do not know their minds, and who seek to find in a babel of discussion plans and proposals which they are unable to frame themselves. But such persons are apt to find, when they enter upon the discussion, that they become the tools and victims of men who have strong interests of their own and distinct views of the manner in which those interests may best be forwarded. For this country to enter upon a conference on such an invitation as the Bimetallists are making would be to fall into a trap. Let us stand by our Gold Standard until it is shown to need alteration; and let us resist all attempts to tamper with it through the medium of a blind Conference just as strongly as we should resist a specific change known to be mischievous.

SHALL WE DEGRADE OUR STANDARD OF VALUE?

IX

SHALL WE DEGRADE OUR STANDARD OF VALUE?

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WHEN after a patient, exhaustive, and anxious enquiry, extending over many months, Lord Herschell's Committee on Indian Currency finished its labours, the Chairman said to me, as we walked away from our last meeting, "Well, at any rate our work has had one effect; it has made all of us more modest than when we began"; an opinion in which I agreed most cordially. So slippery and uncertain are many of the statistics; so abstruse and difficult are the theories involved; and so incomplete is their application to the existing practice of mankind, that I am disposed to believe that those know most about Currency who are least confident, and that those know least who are most positive. "*Quale per incertam Lunam sub luce malignâ—Est iter in silvis.*" When I see the positiveness with which professed economists assert doctrines which seem to me erroneous or doubtful, and hear their allegation that a few months' study is enough to make an ordinary man an authority on this subject, I am tempted to

heave a sigh and wonder whether the difference between us is due to their presumption or to my own incapacity. Thoughts such as these naturally tempted me to say "No" when the Editor of this Review asked me to state the case against bimetallism.

But then I reflected that though an exact explanation of the whole subject may at present be beyond my power, yet that the reasons why we should not accept the proposals of the bimetallists are of a broad and simple character, and such as may well afford ground for practical conclusions, even though we are unable to supply a complete theory of Currency and prices.

What is it that the bimetallists propose to do? They propose in effect to fix by legislation and international agreement the relative values of two different objects—gold and silver—each of which, in the absence of such interference, is subject to its own separate and independent conditions of supply, and to its own separate and independent conditions of demand. Further, they, or the greater part of them, propose this for the express purpose of altering and degrading the standard of value which has served this country for two centuries, and which is rapidly becoming the standard of value of the whole commercial world.

It must be admitted that these are large and startling proposals. If some enthusiastic sect among us were to propose that in every future dealing and in every existing contract, a pound avoirdupois should have half the weight it now has, and that every yard should have half the length it now has; or, that in every dealing with labour a shilling an hour should mean sixpence an hour; we should demand very certain proof of the justice and expediency of such proposals. And if they should propose, further, that ten pounds of bread should always exchange for one ounce of meat, or one

pound of cheese for five pounds of butter, or one pound of tea for one pound of coffee, we should ask them to produce a very specific plan, and to give very certain proof of its feasibility. And yet proposals such as these are essentially of the same nature as the proposals of the bimetallists. We are therefore entitled to require from them very distinct proof both that there is a strong case for an alteration, and that their particular mode of alteration is itself both feasible and desirable. The burden of proof, it must be remembered, lies entirely upon them. It is not enough for them to state a plausible hypothesis, or to pick holes in an opponent's argument. They are bound to prove their own case, and it is not till they have done this that we are bound to show cause against them. They are bound to prove that our existing standard of value is a bad standard; and that the double standard by which they propose to replace it is possible, and is better than our present gold standard.

Now what is the case for making any change at all? It is twofold.

First, that the break of gauge between gold and silver causes great inconvenience and some loss;

Secondly, that gold is a bad standard, partly because it is a fluctuating standard, but chiefly because there is not enough of it to supply currency demands, and gold prices therefore fall.

The first of these evils I admit, though it has been much exaggerated and consequences have been attributed to it which are due to other causes. Nor, so long as some countries use forced paper, and have no fixed metallic standard, can this evil be wholly cured by any manipulation of gold or silver. If the countries which now have either a gold or a silver standard were all to have a gold standard, or if they were all to have

a silver standard, or if they were all to have a joint gold and silver standard, the difficulties of exchange arising from fluctuations of currency would still exist in doing business with countries in the condition in which Argentina or Russia now are, or in which the United States were at and after the time of their Civil War. I do not mention this in order to minimise the mischief arising from an uncertain par of exchange, but to show that it is an inconvenience from which it is impossible wholly to relieve trade, and one in spite of which very large trade can be and is carried on.

But the inconvenience and, in some cases, the loss, arising from fluctuations in the relative value of gold and silver are, no doubt, very serious. Even where they can be met by the help of Exchange Banks, the facilities given by these banks have to be paid for; and where they cannot be so met, a rise or fall in the exchange of gold and silver may seriously affect current contracts, and thus impede good business. Further, the uncertainty of exchange tends to impede gold investments in silver countries; and even where the difficulty is provided against by requiring the interest to be paid in gold, it may be very difficult for a silver country, as is now the case with Mexico, to pay the gold interest of a gold debt. Still more striking is the well-known case of India, to which I shall have occasion to refer below. Taking all these and other circumstances into consideration, I feel bound to agree with the bimetallists that it would be a great advantage to the trade of the world if all nations could have one standard of value, and if an approach to it could be made by fixing a ratio between gold and silver.

But the evil should not be exaggerated. There is a delusive argument on the subject which, if not pressed to its full extent by the more intelligent bimetallists, is

looked upon by most of them with some favour, and which plays the part of Hamlet in the minds of their most active supporters. It is said that the fall in silver operates as a continuous premium on the exports from silver-using countries, which enables the producers of those countries to compete successfully with those of gold-using countries, and to lower the real price of wheat and other articles in the markets of the world. Even supposing that it had this effect, the consumer of these articles might ask whether the effect was a bad one. But in truth the whole thing is a delusion. No alteration in exchange arising out of currencies, or, in other words, in the relative values of the counters in which international accounts are kept, makes any real and permanent difference in the terms on which goods are exchanged between two countries, any more than a change in the yards or pounds by which they are measured.

It is, of course, the A B C of business that, when of two countries, whether having the same or different currencies, one has by excess of imports or otherwise incurred a debt to the other, there is a demand for remittances to pay the debt, which gives the exporters of the debtor country a temporary premium until the balance is redressed or reversed. Even this, though a very wholesome and proper proceeding, is not in itself an advantage to the exporting country. Men and nations grow rich by receiving, not by paying, and payment of debts, though just and necessary, is sometimes a difficult and painful process.

In the same way a fall in exchange arising from an appreciation or depreciation in the currency of one of the two countries in terms of the currency of the other country may give a temporary stimulus to the exports and a temporary check to the imports of the country

whose currency is depreciated. But to suppose that this is an advantage, much more to suppose that it is a permanent advantage to that country, involves a series of absurdities.

In the first place, it involves the absurdity that a country can grow rich at the expense of its neighbours by depreciating its currency.

In the second place, it involves the absurdity that a real profit can be created by the alteration in exchange, whereas it is clear on consideration that such an alteration, unlike improvements in production or transport, can create no real profit, but can only transfer existing profits from the pocket of one party to .the transaction to the pocket of another party.

In the third place, it involves the fallacy, dear to the heart of the Protectionist, that a country grows rich by exporting, not by importing; which is much the same as saying that a tradesman grows rich by parting with his goods to his customer, and not by the payment of his bills.

The fact probably is that whilst in all these cases there is necessarily some profit to the exporting merchant, the country as a whole is a loser by the excess of exports.

Let those who hold the belief that a fall in exchange due to currency is a dominant and continuing factor in promoting exports prove its truth by facts. Let them show us in all or most cases of depreciated currencies a great comparative excess or increase of exports following on the depreciation, *e.g.*, in the case of India and other silver-using countries generally; in the case of the trade of silver-using countries with gold countries, as compared with their trade with silver countries; and in the case of the depreciated paper of the United States and of other countries. This they have never attempted.

In fact, reaction and adjustment are rapid and inevitable. For instance, a fall in exchange, if it stimulates exports, has an equal and opposite effect in checking imports, and this check at once reacts on exports. Again, the additional profit, if any, made by the exporting producer is often, perhaps generally, made by him at the expense of the workman to whom he pays wages, and this soon reacts on the prosperity of the whole country. It may be difficult to trace these adjustments and reactions in each case, but they are so rapid as to prevent the original stimulus from leaving perceptible traces of its effects in the annual Statistics of Trade.

But let us take concrete cases. I have seen it said that Argentina prospers and exports by reason of her depreciated paper; and for the purpose of our present argument a fall in exchange arising from depreciated paper has the same effect as a fall arising from depreciated silver. No doubt a boom may be, and often has been, created by depreciated paper, and to this extent depreciation may contribute, like any other undue inflation, to immediate increase of business and immediate sales of produce, to be inevitably followed by subsequent depression. But is the present condition of Argentina an enviable one? If she can manage to go on at all it is not because there is a heavy gold premium on her depreciated paper, but because she does not pay her just debts. Is this a desirable thing?

But the crucial case is that of India. The allegation is that the Indian producer of wheat and other articles gets for the gold price of his wheat in Europe (which has notoriously fallen) as many silver rupees as he obtained for it before the fall in exchange; that rupee prices have not risen in India; and that consequently he is able to sell his wheat at a price which is ruinous to

his European and American competitor, whilst at the same time he gets in the shape of rupees as much purchasing power as he did before. It is worth while to examine this statement closely.

In the first place, it is not true that the rupee, before the closing of the Indian Mint, retained completely its original purchasing power. There was a distinct rise in the price of labour, and of some articles, though of course a rise which was small when compared with the fall of gold prices. If, and so far as this was the case, there was a distinct money loss to the producing ryot, whatever may have been the profit of the exporting merchant.

In the second place, it must always be remembered that many causes, outside of currency, affect prices, and that the question here is not whether silver prices remained the same as they were before silver fell, but whether they are not higher than they would have been if silver had not fallen. The great probability is that if silver had not fallen, the silver prices of wheat and other Indian produce would, in consequence of improvements in cultivation and transport, have fallen heavily and have been much lower than they actually are. If, and so far as this is the case, the lower gold price at which the Indian producer can sell his produce is due not to exchange, but to the same class of causes as have lowered the price of wheat in Europe and America.

But let us assume for the sake of argument that Indian silver prices have not risen,[1] and that the maintenance of the rupee price of Indian exports is due to exchange. Then, it is clear in the first place that on whatever the Indian ryot has to pay for in gold, *i.e.*, for European imports, he will lose as much

[1] As a matter of fact, subsequent inquiry shows that they have risen. See paper by Mr. F. Atkinson in *Statistical Journal* for March, 1897.

by exchange as he gains in selling his own produce. There is, however, one item on which he will make a considerable gain. One of his chief expenses, probably his greatest expense, is the rent or land tax he has to pay to the Indian Government. This is fixed for a number of years in terms of silver rupees, and in paying the same number of silver rupees to the Indian Government as he did before the fall in silver, he is paying less in the form of purchasing power than he paid before the fall, and less than he was intended to pay. He gains, and the Indian Government loses. Now India, unlike England or the United States, is a country in which the Government is itself a great importer. It imports European brains to manage its Civil Service and its Army; it imports ammunition and all the material for war; it makes railways and irrigation works, and imports brains and materials necessary to create and manage them. For all these things the Indian Government has to pay in gold, either in the form of immediate payment or of interest on debt contracted for these purposes. It is therefore a great loser. Whatever the ryot gains, and probably much more, the Government loses. What then can it do? What has it done? It cannot, being a Government with a character to lose, refuse, like Argentina, or like a bankrupt company, to pay its gold debts. It has to find money to pay them, and, being a very paternal Government, its losses fall on its children. It has to divert its fund, designed to protect the ryots against famine, to purposes of ordinary expenditure. It has to stint its own expenditure, and that of its subordinate local governments on public works; *i.e.*, on the works which promote the industry and welfare of the ryot, and which in countries less paternally governed would be undertaken by companies and

individuals. It has, finally, to put a tax on all goods imported from Europe—in other words, to make all imported necessaries or comforts of life dearer to the inhabitants of India. All this falls necessarily upon the ryot, and as there must be friction and loss in all these operations, the ryot probably loses much more by them than he has gained by the fall in silver. Whatever may be the case with the exporting merchant, the ryot, who is the ultimate producer, is a loser and not a gainer by the fall in exchange ; and it is absurd to suppose that a factor in trade by which he is a loser enables him to compete successfully with his foreign competitor.

I have assumed, what I believe to be the truth, that the fall in the gold value of silver is due to the abundance of silver rather than to the scarcity of gold. But if, as bimetallists are fond of asserting, the fall is due to the scarcity of gold, then the Indian Government has to pay to England much more than it contracted to pay, and the ryot has to suffer the losses to which I have referred, without any compensation or deduction on account of the reduced value of the silver tribute which he pays to his Government.

The Indian Government have always asserted that their Indian subjects do not benefit by the fall in exchange, and the above considerations show that they have reason and theory on their side. The subject was much discussed in Lord Herschell's committee, and their conclusions will be found in paragraph 27 of their Report.

They state that "an examination of the statistics of exported produce does not appear to afford any substantial foundation for the view that in practice the stimulus of a falling exchange, assuming it to have existed, has had any prevailing effect on the course of

trade; on the contrary, the progress of the export trade has been less with a rapidly falling than with a steady exchange." Conversely they say that "Statistics do not show that a falling exchange has had any effect in checking imports." And after giving figures to prove this, they conclude as follows: "Upon the whole we cannot see any evidence that the effect of a falling exchange on the country at large in influencing either exports or imports has over a series of years been very considerable. Some trains of *a priori* reasoning would seem to lead to the same conclusions, and also to the further conclusion that, even if a fall in the gold value of the rupee does stimulate exports, the result is not necessarily to the benefit of India as a whole, though it may temporarily benefit the employer at the expense of the wage-earner, because wages rise more slowly than prices."

One other point. Those who complain of unfair competition caused by a depreciating currency will have done little when they have raised the gold value of Indian silver, unless they can also raise the gold value of South American paper. Argentina promises to be the most formidable competitor of the English farmer, and the prospect of a currency at par in that country fades, alas! in extreme distance.

I have dwelt at some length on this part of the subject, partly because it is a very favourite topic with many bimetallists, and partly because the views of my opponents are intimately connected with what I believe to be the deepest and most mischievous fallacy in the bimetallist case—viz., a belief in the advantages of a depreciating currency.

I mention it also for another reason. It has recently been made the foundation for the proposal, surely one of the most grotesque ever made by responsible states-

men, to the effect that the Republican party in the United States should adopt as their next war-cry, "Silver and Protection"; that they should enforce their policy by forming a League of Bimetallic Nations; and that their League should boycott the goods of every nation which would not adopt their bimetallic standard, or, in other words, which would not purchase their silver on their terms. Such a proposal seems to have been actually made or adopted by Mr. Reed and Mr. Blaine, but it would hardly have been worth while to notice it here, if it had not received support in this country from some of our own prominent bimetallists.[1]

But while some of the evils alleged to arise from the divergence of gold and silver are non-existent or absurdly exaggerated, enough remain to show that very serious mischief does arise from this cause, and that in emphasizing it the bimetallists are right. A single standard of value for the whole world is no doubt a great desideratum, just as freedom of trade and honest dealing throughout the world are great desiderata. Whether the remedy which the bimetallists propose is the right remedy, and, indeed, whether it would be any remedy at all, is a very different question. The recent action of the Government of India, the report of Lord Herschell's Committee, and the action of the Government upon it, point in a very different direction.

Let us turn to the second of the evils which the bimetallists allege as a reason for abandoning a gold standard, viz., that gold is a bad standard in itself, because it is a fluctuating standard, and because, at the present time, there is not enough of it to meet currency demands, and prices have therefore fallen.

[1] See articles in *The Fortnightly Review* for July, 1894, by Mr. Moreton Frewen, Professor Shields Nicholson, and Mr. Faraday.

As regards fluctuation, there is of course no such thing as a perfect or absolute standard of value. It is not even thinkable. All that can be done is to select some substance of which the supply and demand are as little variable as may be, and to make it the measure by which we value other and more variable articles. But, say the bimetallists, the demand for whichever happens to be the cheaper metal will, under the bimetallist system, operate to raise, *pro tanto*, the value of that metal in the market, and thus to make the fluctuations in value of both metals arising from other than currency causes less than they otherwise would be. I think that this is true, supposing always that the bimetallist system works, as its advocates suppose that it would work, by always creating an overpowering demand for the cheaper metal. Will it create that demand? We shall consider this question below.

But the real case against gold, the case upon which bimetallism claims and obtains popular support, is something much less abstruse, and much more plausible. That case put in a few words is, that since 1872 gold has become comparatively scarce in proportion to the demand; that its value has consequently risen; that prices have consequently fallen; and that this fall in the price of goods has checked production; has depressed commerce and agriculture; and has caused general ill-being. But for this belief and for the prospect it holds out of relieving distressed producers by providing a greater abundance of money, we should, in this country at any rate, where we have no silver to dispose of, have heard very little of bimetallism. It is an old story; the ghost of a controversy which we hoped was laid at the beginning of the century by Tooke and others, but which has reappeared as if to remind us of the immortality of our follies. It is,

however, a ghost which is not to be laid by mere exorcisms, or by an appeal to deceased authorities; more especially when the scare concerning the scarcity of gold has received outside support from such men as Mr. Goschen[1] and Mr. Giffen,[2] one of whom sits on the accustomed fence, whilst the other is a monometallist *enragé*. My own belief is that if such utterances as these had never been made, the appeals of theoretical bimetallists would have received comparatively little attention.

What then is the case of those who call for a change of our gold standard on this ground? They say that in consequence of the demonetization of silver by Germany, France, and other European nations, and the resumption of specie payments on a gold basis by the United States, coupled with the falling off in the supply of gold in 1870 and the following years, the demand for gold increased out of proportion to the supply, and consequently that gold has risen in value by reason of its own comparative scarcity.

The question of diminished supply we may dismiss very briefly. The question is of course not simply one of annual supply; but of the aggregate stock of gold, since gold does not perish in the using. The average annual supply increased enormously, as we all know, about 1850, upon the gold discoveries in California and Australia. It fell off a little between 1870 and 1885. It then began to rise again; rose rapidly in 1892 and 1893, and is now larger than it has ever been. Mr. Preston, the Director of the United States Mint, states that the yield of the gold mines of the world in 1893 was in value about 155,522,000 dollars, and that this

[1] Address to Institute of Bankers by Mr. Goschen, 1883.
[2] Article in *Contemporary Review*, June, 1885, and *Essays on Finance*, by Mr. Giffen, Second Series, 1886.

was only 14,951,400 dollars less than the value of the average annual yield of both gold and silver in the quinquennials 1861–65; and only 35,309,000 dollars less than that of the average annual yield of both gold and silver during the period 1866–73. If the annual production of gold in 1894, as is probable, increases as fast as it has lately been increasing, it will very shortly be greater in value than that of both metals in the years immediately preceding the fall in the gold price of silver. At the same time the value of the silver produced in recent years has been about equal to that of the gold.

The result is summarized in the following table :—

	DOLLARS.
Average value of the world's output of gold and silver, 1861–65	170,473,3
Average value of the world's output of gold and silver, 1866–73	190,831,000
Value of the world's output of gold alone, 1893	155,522,000
Estimated minimum value of the world's output of gold alone, 1894	168,299,000
Estimated minimum value of the world's output of gold alone, 1895	183,842,000 [1]

Looking back to the history of supply, it appears that the average annual production of gold, which had ranged from one or two millions to seven or eight millions sterling in the first half of the century, was between twenty-six andtwenty-seven millions in the decade 1851–1860; between twenty-two and twenty-three millions in the decade 1861-1870; between twenty and twenty-one millions in the decade 1871–1880; and between twenty-one and twenty-two millions in the decade 1881–1890. In the last three years it has risen successively to 25, 26, and upwards of 27 millions.[2] Of the whole stock of gold in the world, which is said

[1] Report dated June 12, 1894, pp. 57, 58.

[2] See Table quoted from Mr. R. Barclay by Sir G. Molesworth, in his pamphlet *Silver and Gold*, p. 123. I have quoted facts from this pamphlet where I can. It has received the prize of the Bimetallic League.

by the well-known bimetallist, Mr. Herbert Gibbs,[1] to be estimated at about £1,600,000,000 (of course a very rough estimate), no less than 1,000 millions have been added since 1850.[2]

Against this enormous new supply we have to set the increased demand. To estimate the demand for the purposes of the arts is little more than guesswork, but there is no reason to suppose it proportionately greater in recent years than it was before 1870. Nor is it possible to estimate with any precision the amount which is hoarded either by Governments or individuals, whether in Europe or in the East. But it may well be doubted whether the gold used in the arts, or hoarded, or sent to the East is so absolutely lost to the markets of the world as to have no effect upon its value when used for purposes of currency. Some interesting observations on this subject will be found in Mr. Preston's Report above referred to.[3]

It is, however, not on these demands, but on the new and exceptional demands for purposes of currency, that the bimetallists rest their case. Now according to their prize essayist these extraordinary currency demands since 1870 amount to a little more than £100,000,000—against the £1,000,000,000 additional supply.[4] Surely figures such as these fail to establish even a *prima facie* case in support of the alleged scarcity of gold. There would seem to be more danger of a plethora. To propose under such conditions to add to the material which forms our standard of value, as much in the shape of silver as would double its amount, is a proposal the need for which is certainly not proved.

[1] See *Economist* of September, 1894, p. 1070.

[2] Since this was written the supply has increased largely. See tables at end of this volume.

[3] Pages 60 and following.

[4] *Silver and Gold*, Sir G. Molesworth, p. 50.

But, say the bimetallists, we can prove the mischiefs arising from the want of gold by an appeal to the fall in prices. This is often called "appreciation of gold," an expression which is objectionable for various reasons, and amongst others because it implies what is the chief point at issue, viz., that the phenomenon under consideration is due to something which has happened to gold. Let us therefore keep to the expression "fall of prices." Now in order to prove their case the bimetallists have to show:

First, that all gold prices, or nearly all, have fallen.

Secondly, that the fall is due to a want of the standard metal.

Thirdly, that the fall has been mischievous.

I venture to think that not only have they not proved any one of these things, but that the presumption on each of these questions is against them.

First, then, they have shown beyond doubt that since 1870 the wholesale gold prices of a very large number of articles sold in the free markets of the world have fallen very largely. It is unnecessary to repeat the well-known details,[1] but it may be stated that, taking the average of the whole, these prices have fallen since 1873 by something over a fourth, possibly by a third. But these are only the wholesale prices of movable commodities sold in the great markets of the world; and sold, it may be observed in passing, under circumstances in which gold is never, or hardly ever, given in exchange for any of them. But there are other classes of gold prices, which, if the fall of prices is due to want of the standard metal, must be equally affected by that want, of which the bimetallist case makes no mention. These are:

[1] See "A Table of the Index Numbers used to show the Fall," Sir G. Molesworth's pamphlet, p. 57.

First, retail prices, in which some gold does occasionally pass, and which have certainly not fallen as much as wholesale prices.

Secondly, prices of immoveables; in other words, of land and houses, which will probably be found to have followed local demands.

Lastly, the prices of labour and of service; in other words, wages and salaries. These have notoriously risen. It is needless for me to quote the reports of successive commissioners, or the results of the inquiries of statisticians on this point. The fact is notorious. Not only have real wages increased by a diminution of the price which wage-earners have to pay for the necessaries and comforts of life; but nominal wages measured in gold have risen also.[1] This, according to the recent careful investigations made by Mr. Little for the Labour Commission, is true not only of the wages of artisans but of the wages of agricultural labourers.[2] Now this is a business in which there is no doubt real and permanent depression, and in which the landowner and capitalist employer have suffered a great diminution of rent and profits. It is also a business in which the maintenance or rise of wages cannot be attributed to any such extraneous cause as the action of Trade Unions. This general rise of wages is a cardinal fact which alone is sufficient to negative the allegation that there has been an "universal fall in prices" or "appreciation of gold."

But secondly, have the bimetallists proved that any such fall of wholesale prices of commodities as has occurred is due to a want of gold? Nothing of the

[1] See for the most recent figures in the United States the "Senate Report of the United States Senate on Prices and Wages," No. 1,394, March, 1893, pp. 99, 100, 177, 180, and 190.

[2] See "Report of Labour Commission," c. 7,421, 1894, p. 9, par. 4; and App., p. 204 to 217. See especially par. 79.

kind. On the contrary, the hypothesis is open to a variety of answers, any one of which is sufficient to show on what an insufficient foundation it rests.

In the first place, the fact above noticed that all gold prices have not fallen, raises a strong presumption against it.

In the second place, there is a library of books, pamphlets, and articles written by able economists [1] to show that there are amply sufficient causes relating to the commodities themselves to account for the fall in their gold price without any recourse to the hypothesis that gold has itself altered. Of these, those which have struck me most are articles by the late Professor Erwin Nasse, of Bonn, to whose writings my attention was called by the excellent papers he contributed to the Gold and Silver Commission.[2] His papers on this subject are two articles on "The Fall in the Price of Commodities during the last Fifteen Years," and one on "The Final Report of the Gold and Silver Commission," [3] and I refer to them here because they seem to me to contain the best summary of the arguments on this part of the subject. They are especially valuable since he deals at length with the contention so much relied on by Mr. Giffen and the bimetallists who have followed him, that whilst improvements in production have gone on continuously from 1850 to the present time, gold prices rose until 1872–3 and fell after that date. Professor Nasse points out that the great wars of the century, the Crimean War, the Austro-Russian War, the Franco-Austrian War, the Franco-German

[1] Messrs. W. Fowler, Marshall, Le Roy Beaulieu, Forsell Laughlin, David A. Wells, Edward Atkinson, and others.

[2] See second Report App. No. VII., p. 257.

[3] *Jahrbücher für National Œkonomic und Statistik.* Fischer, Jena, 1888, 1889.

War, the American Civil War, and the Indian Mutiny, all took place in the earlier part of the period in question, and that the period since 1873 has been comparatively peaceful, leaving free scope to the employment of accumulating capital and of industry in the arts of production and transport; that the effect of improvements in production is cumulative; that both the chief building of railways and the development of railways already built in America and in India, in Russia and other parts of the world, have taken place in the later period; that the use of the Suez Canal and the greatest improvements and economies in ocean navigation have taken place since 1870; that improvements in European and American manufacture preceded these improvements in transport, and that whilst the earlier improvements in manufacture affected finished products, subsequent improvements in transport brought into use large portions of the globe hitherto uncultivated, and thus largely reduced the cost of agricultural products—*i.e.*, of food and raw materials, and through the reduction of the cost of raw materials, reduced still further the cost of manufacture—that the statistics of prices confirm this view, since they show that the cost of raw material rose much more than that of manufactured goods before 1873, and since then has sunk much more. He further points out that the fall in the prices of different articles, so far from being uniform, differs very greatly indeed; that the greatest fall has taken place in the case of those articles the supply of which are most affected by improvements in production and transport, whilst in some articles, in case of which there has been no such improvement, there is no substantial fall. To this he adds that since 1870 many nations, seeking to protect themselves against a fall of prices, have adopted a system of

Protection which, as is well-known, if it at first secures a higher price at home, ultimately tends to glut, to over-production, and to low prices in free markets. It is of course impossible for me here to do more than glance at these arguments. But in face of considerations such as these it is idle to say that there is any proof whatever that the fall of prices since 1873 is due to the want of a sufficient medium of exchange. The presumption is all the other way.

There is another line of argument of great importance which strongly supports this same view, to which bimetallists have hardly adverted. In one sense the "quantitative theory" of currency and prices, as it has been called, is no doubt sound. As gold is the standard of value, if there is a demand upon the whole stock of gold in the world which exceeds the supply, the value of gold must rise. We have already seen that there is no proof whatever of this at the present time, and that what evidence their is is in the opposite direction. But by the "quantitative theory" is generally meant something very different, viz., that the demands upon gold *for currency purposes* increase in proportion to the increase of commodities, of population, or of exchange. This is an entire mistake. It arises from confounding gold as a standard of value with gold as a medium of exchange. Gold is no doubt both the one and the other, but whilst it still continues to be the sole standard of value, it has in the present conditions of business long ceased to be the chief medium of exchange, and is constantly playing a less and less important part as a medium of exchange, both in this country and in the world generally. A demand for money, or for currency, or for a medium of exchange, is not a demand for gold. We do not pay our debts with

gold, but with cheques, or other forms of credit. Credit is not, as is sometimes said, simply an economy of gold; it is a substitute for gold, and one which expands and contracts with the demand. Not one hundredth of the wholesale exchanges of this country are effected by the use of gold. Indeed, paradoxical as it may seem, it is often high prices which create money, and not money which creates high prices. When bimetallists attempt to deal with this argument, which they seldom do, they tell us that credit money, the money of the market and the city, bears some fixed and permanent proportion to gold. This is not the case. There is a constant and regular growth of credit money without any increase of the gold on which it is based. The most advanced nations use much less gold in proportion to their dealings than the less advanced nations; and we ourselves use less and less gold every day in proportion to our trade and business. Besides this secular growth of credit money, there are the temporary expansions and contractions of credit in what are called good and bad times, which bear no quantitative relation to the gold actually used. And all this credit money, *so long as it exists*, has precisely the same effect for the time being on prices as gold has.

Even of that very limited portion of the medium of exchange or money, which is known as "currency," gold now forms a comparatively small part. For instance, in Canada the whole amount of the currency, excluding fractional silver currency, is about £10,000,000, and the stock of gold about £2,400,000; in Belgium the currency is about £23,000,000, and the gold about £5,000,000; whilst Holland maintains a currency of £34,000,000 on a stock of gold of £5,700,000.[1] I

[1] See Report of Indian Currency Committee, pars. 67 to 98. The

have taken these countries as examples because they are solvent countries, with a gold standard and with currencies at par.

The only gold used in wholesale dealings, and, indeed, in most of our retail dealings, is the gold kept as a reserve by the banks—a reserve necessary in order to insure confidence by enabling any one who has a credit to get gold if he wants it, which he very rarely does. It would far transcend my limits to enter fully upon the character of these reserves—upon the various amounts which, under various circumstances, it is thought necessary to maintain—or upon the way in which they are replenished, especially as I have done so at length in another place.[1] It may be sufficient here to state that these reserves form the one and only connection between gold and wholesale prices, and that the recognized mode of increasing these reserves is by raising the rate of discount. Now, it is a notorious fact that these reserves have not only shown no diminution since 1873, but on the contrary have increased; and it is an equally notorious fact that the rate of discount, *i.e.*, the means of procuring gold when wanted, has not been higher or more fluctuating since 1873 than it had been in previous years, but the contrary. It is, no doubt, perfectly true that the rate of discount fluctuates with the supply of and demand for money, and not with the supply of and demand for gold; and it is perfectly true that there may be an abundant supply of gold with either a low or a high rate of discount. But it is no less true that a deficient supply of gold, such as is alleged to have caused the fall in prices, could not have occasioned that fall without making itself apparent in diminished reserves

facts there stated deserve consideration by the upholders, if there still are any, of the Act of 1844.

[1] See *Gold and Credit Prices*, published by Cassell and Co., 1878.

and an increased rate of discount. That no such facts have occurred is additional proof that the alleged scramble for gold is altogether an imagination.

The "scarcity of gold" scare becomes almost a joke when, as I write, I see the chief bimetallist organ in London groaning over the present glut of gold in the banks, and scolding Austria for not taking more gold off the market to complete the reform of her currency. The Bank of England alone, it seems, holds £39,000,000 of gold against £28,000,000 held last year; the rate of discount is nowhere; and all this is simultaneous with prices still low and some falling, and with wheat under 20*s.* a quarter.

But the bimetallists have another string to their bow. Silver prices, they say, have remained steady,[1] or nearly so—in other words, gold has appreciated in terms of silver as much as in terms of commodities.[2] How can you explain this except by supposing that whilst silver and commodities have both remained stationary, it is gold which has risen in value with respect to both?

I have already shown that there are strong reasons for supposing that it is not changes in gold but changes in commodities which have caused the fall in wholesale prices. If this is so, the same thing is likely to be true of silver. And there are very good reasons for thinking that silver has fallen in value, rather than that gold has risen.[3] After the French and German demonetization of silver, that metal became a mere commodity in the markets of Europe,

[1] That this is not the fact is shown by more recent inquiry. See paper by F. Atkinson in *Statistical Journal* of March, 1897.

[2] See the well-known diagrams showing the correspondence of the price of silver and of commodities.—Sir G. Molesworth's pamphlet, p. 68.

[3] See "Report of Gold and Silver Commission," Part II., pars. 50 to 70.

and became open to all the influences which affect an open market, whilst the same thing has not been the case with gold. The increased produce of silver from the mines is known to be very great. It is produced chiefly in America, and if not sold in America, comes to Europe, London being the great market. The stock of silver in Europe upon which any increase in production operates is comparatively small; it consists of manufactured silver, of which we do not know the amount, and of silver money circulating at its silver value, which is probably not more than about £80,000,000. Upon this small stock, therefore, the increase of production has a very great effect. But it may be said the East is the great market for silver. Why did not the East take the cheapened silver and keep up its price, as Bagehot and others expected it would? Simply because other commodities which the East wanted had been cheapened as much as silver, and it was therefore no more profitable to export silver to the East than to export them. It may be added that it is probable that, in consequence of the increasing gold remittances due from India to England, the balance of liquidation has been of late years more and more against India; and that this balance has, since the rupture of the bimetallic tie, operated to depress the gold value of the silver rupee, and to check the flow of silver to India.

Considering all these arguments we may conclude, not only that the fall in the gold price of silver as well as of wholesale commodities has not been proved to be due to any scarcity of gold, but that the probability, at any rate, is entirely the other way.

This conclusion will help us to determine how far the bimetallists have proved their case that the fall in

the prices of commodities has been mischievous. Let us admit with them that rising prices stimulate, and that falling prices depress human energy, and that people may be in better spirits when they are getting twice the number of sovereigns than when they are getting twice the quantity of goods. But booms of all kinds are very doubtful blessings, and the boom which preceded 1872, coupled with the reaction from it, was probably one of the worst of commercial mischiefs which this country has experienced. Whether we have yet entirely recovered from it may be doubted. But with that reaction we are not now concerned. We are concerned only with the fall of prices, and with that fall only so far as it is alleged to be due to currency causes. Now, if the fall in prices is due to a scarcity of the standard of value, we may at once admit that it is mischievous. Debtors, and all persons who have to make fixed payments, have to pay in goods more than they promised to pay, and they have no more goods to pay them with. But if the fall in prices is due, not to a want of gold, but to an increase in the quantity of gold, and to a diminution in the expenses of production and transport, then there is no such evil. People who have to make fixed payments have to pay more in goods, but they have more and cheaper goods with which to make the payments, whilst the community is better off by getting more goods with less effort. This is the economic truth stated in the most general terms. Let us look at it a little more closely, as it concerns the wages of labour. It is notorious that wages have not fallen during the period in question. Money wages have, on the whole, risen; whilst real wages, *i.e.*, the things which a wage-earner can buy with his money wages, have very largely increased. Even in Agriculture, the most

depressed of our industries, this is the case. Is this a state of things to be deplored? Is it not, on the contrary, exactly what we should expect in an advancing community, with a sound and stable standard of value? The material progress of mankind in science, in arts, in civilisation generally, consists in getting a larger and ever larger result with the same expenditure of human effort. If there could be anything like an ideal standard of value, it would be a fixed quantity of human labour. When, therefore, we find that there have been improvements in production and transport such as the world never knew before, and that simultaneously a day or a week's labour, whether of brain or muscle, produces to the worker a reward which, when measured in gold sovereigns, is as large as, or larger than he formerly received, and which, measured in the products which he requires for use in life, is much larger than he formerly received, is not such a fact evidence that the money standard has done its duty; that it retains its due proportion to human labour; or at any rate that measured by human labour it has not appreciated? To me, I confess the strongest argument in favour of retaining our gold standard untouched is the maintenance of the rate of nominal wages, and the rise in real wages; and the strongest argument against degrading that standard is that it would diminish the reward of labour, by increasing the price of the things which the labourer has to buy, without increasing his money wages in the same proportion.

So far from a fall in the gold price of wholesale goods being a proof that gold is an unstable standard, the truth is the other way. If, under recent conditions of transport and manufacture, there had been no such fall, we might well have doubted our standard; and if

it is the fact that there has been no fall in wholesale silver prices, it is a strong argument against the stability of a silver standard.

We are now in a position to determine how far the bimetallists have made out their case for a change in our standard of value, and we may come to two conclusions; the one, that there is a real evil in the divergence of the gold and silver standards, though it has been much exaggerated; the other, that there is no proof of the instability of our own gold standard, or of any mischief arising from it.

Let us now examine the proposed bimetallist remedy. The first question is whether it is practicable. On this point the bimetallists appeal, first to principle, and then to history. Their proposal is that all nations, or the chief commercial nations, shall come to an agreement to open their mints freely to both gold and to silver and make either of these metals when coined legal tender at a certain fixed ratio. When this is done, every one who has either silver or gold will, they say, be able to get it coined into standard money, and to pay his debts with either gold or silver, as the case may be, at the fixed ratio. An ordinary debtor will not, of course, do this. He will, as he now does, pay his debt by a cheque on his bankers. The actual custody of gold and silver will remain, as it now is, with the bankers and bullion brokers. But every one who has a debt to pay, and who has silver or a claim to silver, will be able, if necessary, to get his silver coined into standard money, which in any country of the bimetallic union *must* be received by his debtor in payment of his debt. If the gold price of uncoined silver is below the bimetallic ratio, he will pay in silver, and if the silver price of uncoined gold is below the ratio he will pay in gold. Thus the demand will always be

thrown on the cheaper metal, and the bimetallic ratio will be preserved.

This, as I understand it, is the bimetallic theory. The gist, and, so to speak, the sting of it, lies in what is supposed to be the effect of making a metal, or one of two metals, legal tender. There is nothing contrary to any principle of free trade or of justice in the free coinage of two, or of any number of metals. The questionable point is whether it is consistent with the true principle of freedom of exchange to enable a debtor to pay, and to compel a creditor to receive, payment of a debt in either of two substances, instead of in one. I am not disposed myself to insist on any *priori* objection of this kind. If a man is required to receive payment of his debt in silver when he has stipulated for payment of it in gold, or *vice versa*, there is obvious injustice. But if both parties have known what they were about in making the contract, there is no question of injustice, but simply one of convenience. Nor can I assert, with some economists, that a law cannot create or increase value. Surely by selecting a metal to be used as a standard, by admitting it to the exclusive privilege of coinage, and by enabling every one to pay his debts in the metal so coined, a value is given to the metal which it would not possess without such law. So far, the bimetallists are right. Governments and laws can do something towards creating or increasing value. But their powers are very limited. If the Government of any great nation were to make aluminium or platinum its standard of value, to coin it freely, and make the coins legal tender, it would probably thereby raise the value of aluminium or platinum. But there are obvious limitations to this supposed effect of the law of legal tender. If any Government, or if all Governments together, were to

do such a foolish thing as to attempt to make slate stones legal tender, or, in other words, to compel creditors to receive payment of their debts in slate stones, they might create confusion, but they certainly would not be able to add much value to slate stones, or to make them pass as current coin. The illustration may sound absurd; but it is important, as we shall see hereafter, to recognise, as a matter of theory, that the law of legal tender has a very limited sphere within which it can operate. It has no absolute and unlimited power of conferring value.

But the bimetallists do not rely on theory alone. Their strongest arguments are derived from history, and here they have, I admit, a good deal to say for themselves. They point to the well-known fact that so long as France retained her bimetallic system, the ratio of gold to silver in the markets of the world varied very little indeed, and that the great divergence between the two metals began when the French refused to coin silver. This fact is not denied, and it seems to me, in spite of all that Mr. Giffen has said, that it is not to be easily explained away. France in the earlier part of the century freely took silver from other countries and was a silver country; when the gold discoveries came she took gold and became a gold country, and in this way she maintained the balance between the metals. Whether her willingness to use either metal was the cause of her bimetallic law, or her bimetallic law the cause of her willingness to use either metal, may be an arguable point. But it seems to me to be beyond doubt that her bimetallist law was the form in which she expressed her willingness to take either metal, and impossible to assert that as such it did not have the effect attributed to it. Nor can I have any doubt that if any number of great nations

possessing among them stocks of both metals were really willing to use either the one metal or the other; and were to express their willingness to do so in the form of a bimetallic agreement, and if the men who compose those nations were willing to adhere to such an agreement, and to carry it out in their private transactions, it would have the effect of maintaining the ratio thus agreed on. But to say this is little more than to say that value is a matter of opinion and agreement, and that if all people agree to take one ounce of gold for sixteen ounces of silver, their agreement, so long as it lasts, will be effectual.

Whether such an agreement is possible is another question. There has been an infinity of argument about the details of the history of the currencies of different nations. Volumes have been written on the questions whether Locke and Newton were right in the advice they gave the British Government; whether that advice was properly followed; whether Lord Liverpool was right in his famous treatise; whether the bimetallic ratio of 16 to 1 in the United States was a proper ratio; whether the Government of that country was right in rejecting the free coinage of silver on the resumption of cash payments; whether Germany and the nations which followed her did right in adopting gold, and finally whether France was right closing in her mints to silver. To discuss these questions properly would require infinite space; nor, as it seems to me, are they really material. The lesson we have to learn from history is of a broader character. Until the beginning of the last century the nations of the world were uncertain in their choice of a standard. Some preferred gold, some silver. Our own Government, as is well known, at one time preferred silver, and would gladly have kept it as the standard, but, for reasons which we need not examine, failed to do so. Nor is it

necessary to inquire whether, if in each separate case each nation and government had done something different from what it did, the double standard and bimetallic ratio would have been preserved. The broad fact is that they did not do this; and that one and all have by degrees and at different times accepted gold. During the last century and the present, the prevailing tendency has been in the direction of gold. I do not care to distinguish too carefully between the habits of people and their laws, for I believe that in this, as in other matters, laws are effectual in proportion as they are in accordance with habit. Whether by habit or by law, or by both, gold has during the last two centuries been displacing silver. England has practically been a gold country since the beginning of the last century, and her practice has crystallised into a long settled law. Our own great colonies are monometallic gold countries. The United States, originally bimetallic, have also been practically a gold country since their ratio of 16 to 1 sent their silver to France; they became legally monometallic in 1874, and they have recently emphatically declined to return to silver. Germany adopted gold definitely in 1871, and Scandinavia, Holland, and more recently Austria, have followed suit. France, with her bimetallic system, having first been a silver country, allowed her bimetallic system to act when it became a question of taking gold, but put an end to that system when there was a danger of its bringing her back to silver, and she is now a country with a gold standard of value. The nations of the Latin Union, Belgium, Italy, Switzerland, and Greece, have followed France. Finally, the Government of India, the greatest silver country in the world, has, in closing its mints to silver, taken a step which would be meaningless and mischievous if it did not mean the final adoption of a gold standard. There is

no possibility of mistaking this great current of habit and of legislation. It is all in one direction, viz., in the direction of a single gold standard. The bimetallists are fighting against the current of events in attempting to go back to silver.

If this is a right view of history, it throws much light on the bimetallist view of legal tender. A law of legal tender may have been efficient when it was on the whole in accordance with the habits and tendencies of a people; it may have given effect and precision to those tendencies, and may have even modified them; whilst at the same time a law of legal tender, if at variance with the habits and tendencies of the people, may either have no effect, or only the effect of creating mischief and confusion. Suppose, for instance, that a law were adopted in England, making silver legal tender at a ratio of 16 to 1. In the case of existing contracts the result would be a great deal of fraud and robbery; and in the case of future contracts the result would probably be, as has already been the case both in London and New York, that contracts would, in spite of the law, be made in gold, and we should have a standard of value adopted by the people themselves side by side with a different legal standard of value imposed by law.

There is ample reason, therefore, to doubt whether past history gives us any help towards the adoption of such a system of international agreement as the bimetallists propose. No such system has ever existed in the past; and such bimetallism as has existed, has existed under very different conditions from those which now exist.[1]

There are further reasons of no little weight against any attempt at an international agreement. It will be seen on looking at any of the agreements which have

[1] It is no business of mine to defend the language of the second part of the Gold and Silver Commission, which is perhaps less

been proposed by bimetallists, that the matter is by no means a simple one, and that it would be necessary to have many subordinate stipulations tying the hands of the partners to the agreements in respect of the future management of their currencies. All such obligations are inexpedient, and might prove very inconvenient to us. It is said, indeed, that it will be the common interest of all nations to act upon such an agreement honestly. This may be so; but, if so, why tie their hands? Besides, nations often do what is contrary to their own interests; and their notions of their own interests often differ. We think Free Trade good for ourselves and for the world; and on this ground we made Free Trade treaties. But other nations do not agree with us; and many of the most ardent advocates of Free Trade now believe that the cause has been more hindered than advanced by these treaties. We believe that it is much to our interest that every one who has a claim on England should be able to cash it at once in London in gold. Other nations hoard gold or throw difficulties in the way of getting it. We believe a forced currency justifiable only as an exceptional expedient. Other nations make it their constant practice. With all these differences is it wise to tie our own hands by an international agreement in so vital a matter as currency? It is not necessary to specify future differences which might arise under any such agreement. It is sufficient to know that such differences may arise.

cautious than could be wished; but if the bimetallists who are so fond of quoting par. 107 would pay more attention to the condition mentioned in that par., viz., "*If the nations alluded to were to accept and strictly adhere to bimetallism at the suggested ratio,*" and if they were also to pay full attention to the various qualifications contained in pars. 113 to 118 of the same part of the Report, they would no longer claim the monometallic members of the Commission as witnesses to the present feasibility of a bimetallic arrangement. Besides, much has happened since that Commission reported.

But there is one difference which stares us in the face at the present moment, viz., the question of a ratio. Bimetallists generally shirk this difficulty, and wish to postpone it for consideration by a conference. As if a conference could settle a point on which the nations are at direct issue, and on which their interests are entirely at variance. The question of ratio is no subordinate one; it is of the essence of the whole case. If we were all agreed about the ratio, there would be no necessity for anything further. If we are not agreed, no experts, no law, and no treaty can settle it. And it is a question which becomes more and more difficult every day. Mr. Courtney, with the candour and honesty which always distinguish him, proposes a ratio approaching to the present market ratio. But this would not be listened to by France or the United States. Mr. Cernuschi proposes the old ratio of $15\frac{1}{2}$ to 1, a prescription which has proved too strong for our most advanced bimetallists, since it would mean that every man who owes twenty shillings in gold would be able to pay it with a fraction of that sum. Mr. Foxwell proposes a "climbing ratio," beginning with something like the present ratio and rising by degrees to the old 15 or 16 to 1—a proposal which seems to me to combine the maximum of practical inconvenience with the maximum of injustice. If you cannot even propose a feasible ratio, how can you expect to maintain one? A bimetallic agreement is really impracticable.

If, then, it is not practicable, it is, perhaps, scarcely worth while to consider whether and under what circumstances it would be unjust—but the point should not be altogether passed over. If no existing contract is interfered with, and if in future dealings every one fully understands what he is to pay and to receive, the adoption of the bimetallic standard would not, as it seems to me, cause injustice. Perhaps we may go a

little further and say that if our present standard is now really rising or falling in value, it would not be unjust, even with respect to existing contracts, to take a step which would prevent it from rising or falling further. But here we are on very dangerous ground. If, on the other hand, the bimetallist agreement, by enabling the debtor to pay a smaller quantity of gold or requiring him to pay a larger quantity of silver than he has agreed to pay, alters the terms of existing contracts, if it raises prices without at the same time raising wages, or raises wages without at the same time raising prices, it will do gross injustice. In other words, any bimetallic ratio to be just must conform to the present ratio, or, in case of past contracts, to the ratio existing at the time the contract was made. How difficult, how impossible this is we have seen above.

On the whole, we must conclude that the proposals of the bimetallists are in the present state of the world impracticable, and would probably be unjust. Though their case has some plausibility and is not to be disposed of *a priori* by the mere repetition of economic formulæ, yet on examination it breaks down; and in matters of currency, as well as in other matters, it remains true that laws cannot tie together in a fixed and permanent relation of value what natural conditions and human interests and habits have placed asunder.

To resume, the bimetallists, as we said at the beginning, have to prove their case. How much of it have they proved?

They have proved that there has been a fall in the wholesale gold prices of certain commodities.

But they have not proved that this fall is due to the divergence in the values of gold and silver.

Nor have they proved that this fall is due to any failure in the supply of gold or to any defect in our gold standard.

Nor have they proved that this fall is on the whole mischievous.

Further; they have proved that the divergence in value of gold and silver, the two great standards of the world, has worked and is working mischief.

They have proved that under certain circumstances no longer existing, human laws by selecting one or other of these metals as materials for currency, and making them legal tender, have helped to give them a certain steadiness in relation to each other.

But they have not proved that under existing circumstances it would be possible by any legislation or international agreement to tie the two metals together again, or to maintain the tie when made.

> "Humpty Dumpty sat on a wall,
> Humpty Dumpty had a great fall,
> Not all the King's horses or all the King's men
> Can put Humpty Dumpty up again."

They have therefore failed both in establishing the case for a change of our gold standard, and in establishing a case for the remedy which they propose.

Here my argument might end. But I cannot conclude without expressing a strong personal opinion that the remedy for this divergence of the standards is to be sought in another direction—viz., in the adoption of a single gold standard by the world. The tendency of past history seems to me to point in this direction. The immense convenience of one single standard of value, dependent on simple, natural conditions, is obvious. The largely increased supplies of gold during the last fifty years, which have scarcely intermitted and are now again on the increase, help to remove any difficulty which might arise from a scarcity of that metal. But the more important consideration is that the demand for gold as currency becomes proportionately less with

advancing civilisation. Gold continues to be the standard of value; but is ever more and more ceasing to be the medium of exchange. In advanced countries the proportionate number of exchanges affected by the use of gold is already very small, probably not one per cent., and becomes smaller every day, whilst in less advanced countries there is indefinite room for the expansion of credit. Gold forms an infinitesimal proportion of "money" and a small proportion even of currency, and this proportion grows less. We pay with credit, and only in the very last resort with gold. Those who have not thoroughly mastered this great fact in modern business (and I know of no bimetallist and scarcely any English economist[1] who has) are not competent to advise on questions of prices and of currency.

At the same time, the goal is far off—patience and careful observation of circumstances will be absolutely necessary. A precipitate step in the right direction may be as mischievous as a step in the wrong direction. In the meantime let us possess our souls in patience; let us keep the standard which has served us so well; and, above all, let us beware of self-confident reformers and their ingenious, but unsatisfactory, remedies. Such remedies may possibly raise nominal prices and even create a boom, but they can never reanimate a decaying industry, or be the foundation of true prosperity—whilst they are only too likely to rob creditors for the benefit of debtors, and to increase the profits of capital at the expense of labour. Let us answer the question I have placed at the head of this article with a decided negative.

FARRER.

[1] I except Mr. Henry Dunning Macleod, to whom and to whose works on Credit I am proud to confess my own special obligations; as well as to the late Professor Erwin Nasse of Bonn; to Professor Taussig of Harvard, whose work on Silver I recommend to all who are interested in these questions; and to Mr. Edward Atkinson of Boston, whose writings are well known in this country.

WANTED, A RATIO

X

WANTED, A RATIO

FROM "THE TIMES," MARCH 5, 1895

TO THE EDITOR OF "THE TIMES"

Sir,—We are flooded with the literature of gold and silver. Scarce a post that does not bring me a bimetallic letter, or article, or book. In spite of my invaluable friend the waste-paper basket, my shelves groan and my cupboards overflow. And what is it all to prove? Why, that there has been, can be, ought to be, and, but for the perversity of Lord Liverpool and Sir W. V. Harcourt, would be, an everlasting fixed ratio of value between gold and silver. But when I ask what this ratio is to be I get no answer. Is it to be 15oz. to 1, as it is said to have been before the fall? Or is it to be 30 to 1, which is about the market ratio in these fallen days? Is silver to be worth 30d. an ounce or thereabouts, as it now is? Or is it to be tariffed back to the 60d. an ounce at which it once stood? Is the stock of silver in the world to be worth what it is now, or is it to be worth twice that sum? Is the world to give a bonus of cent. per cent. to the owners and miners of silver? If I have borrowed a shilling, am I to get off by paying 6d? If I am owed two

silver dollars for interest or wages, am I to put up with one? "Oh!" say my bimetallist friends, "these are points which will be easily settled if you will only go into a conference; they are matters of detail, not of principle." Much obliged to them; but do we care to put the determination of such a point into the hands of a dozen or twenty gentlemen sitting round a table, many of whom will represent silver? The determination of the ratio is not a question of detail; it lies at the root of the whole controversy; it is the one practical point we all care about; it is the test of the principle of bimetallism.

I look anxiously for an answer, which need not be longer than this letter. FARRER.

ABINGER HALL, *Feb.* 28.

FROM "THE TIMES," APRIL 20, 1895

TO THE EDITOR OF "THE TIMES"

Sir,—On March 5th you were good enough to give publicity to my groans under the present deluge of bimetallic literature, and to my question, What, in the opinion of bimetallists, is the fixed, natural, and everlasting ratio between gold and silver which, on their theory, is to bind the world together, to raise prices, and to make us all happy for ever?

The torrent of bimetallic literature still increases in volume; pamphlets pour in; the magazines are filled with bimetallic articles; and the brilliant leader of the Conservative party chants the praises of bimetallism at the Mansion-house, amid a chorus of penitent converts and rejoicing acolytes.

But to the simple question which I asked the answers are discordant, doubtful, or dumb, as your numbers of the 4th, 5th, and 9th of March bear witness.

Sir D. Macfarlane asks me if I will accept 25 to 1.

Mr. E. Sassoon suggests $23\frac{1}{2}$ to 1 with quinquennial revision.

Mr. Hastings Berkeley thinks the ratio ought to be $15\frac{1}{2}$ to 1, but doubts if he will get it.

Messrs. Dolphin, Greene, Haig, Jefferds, and General Saxton wish to make it $15\frac{1}{2}$ to 1—or, in other words, to take sixpence and call it a shilling.

Messrs. C. Hoare, Parker, Renshaw, "A. C. M.," "An Observer," "C. S.," "R. W. R.," and "An Indian" give no answer except that the ratio is to be settled in some way or other.

These answers leave me no wiser than before. Those which are indefinite tell me nothing, and those which are definite are inconsistent, not to say impracticable.

But it is when I turn to the great lights of bimetallism, to the men of light and leading, the philosophic reformers whose faith in their ratio is such as to make them ready to propose an economic revolution, and who have, if we are to believe the newspapers, raised a very large sum in order to propagate their creed, that I am most disappointed.

Mr. H. R. Grenfell scolds me for asking the question.

Sir W. H. Houldsworth says that this "natural" ratio must depend on circumstances, without telling me what these circumstances are.

Mr. Herbert Gibbs thinks that it is to be a matter of bargain between the nations of the world, but gives no hint as to what our view of the bargain is to be.

Professor Foxwell, who is, apparently, the academic leader of the new sect, was, a few months since, in favour of a "climbing ratio"; in other words, a ratio which, commencing at or near the present market ratio,

was, by some unknown process, to be gradually raised to the historical $15\frac{1}{2}$ to 1. He is now, as appears from his lecture at the National Liberal Club, contented, at any rate for the momentary purpose of answering my question, to stay his climb at 20 to 1.

Under these circumstances I have waited for the great annual function of the Bimetallic League to see whether any further light would there be thrown on the solution of my question. But in vain! In the triumphant utterances of the Conservative leader, who seems to have found in the "beautiful reasonings of bimetallic philosophers" one firm rock on which he could place a steady footing of belief, I find not the faintest suggestion of an answer to my question, or even a consciousness that there is such a question.

Surely if this is all the great bimetallic apostles can tell us about the central point in their creed, we do not deserve to be called sceptics for refusing to adopt it. Further, do not these answers to my question dispose of the notion that there is any natural fixed ratio between the two metals? If there is to be any ratio at all other than the market ratio, it must be artificially created; whilst, at the same time, these advocates of a fixed ratio have not the least notion what it is to be, or on what principles it is to be determined; or, if they have, they decline to speak.

To the above quotations from your columns let me add two recent statements from other sources.

The one is from an article by Mr. Julius Landsberger on the German Silver Commission, in the *Economic Journal* of March last, in which, after discussing the fruitless work of that Commission, he concludes that the whole question is so difficult that it can only be settled by a conclave of experts of all nations sworn to absolute secrecy, whose final decision is to be

forced by some unexplained exercise of power on a passive and obedient world.

The other is from an article by the learned Mr. Alexander Delmar in the April number of the *Fortnightly Review* on Mr. Macleod's "Bimetallism," in which Mr. Delmar repudiates altogether the doctrine, so dear to his bimetallist allies, that France maintained, or endeavoured to maintain, "bimetallism" down to 1874. He speaks of the "confused and warring coinages of the Renaissance after the Roman regulation money had broken down," and of the chaotic currencies of modern Europe, in terms which endorse and confirm the views contained in Mr. Shaw's very interesting "History of the Currency," and he appeals for proof of the truth of the bimetallic theory, not to the practice of modern nations, but to the time when the Roman or Byzantine Emperor possessed a monopoly of gold coinage, and determined by an exercise of absolute power the quantity and value of money.

Though these statements do not purport to give, in terms, an answer to the question, "Wanted, a Ratio?" they have a direct and important bearing on its solution. They indicate in no doubtful manner the fact, obvious enough to any careful student of bimetallic literature, that the drift of bimetallic speculation leads inevitably to the economic absurdity that "ratio" or value (for ratio is value) is a matter to be determined, not by supply and demand, but by the exercise of arbitrary power.

To return to the specific replies to my original question. Am I uncharitable in supposing that all the respondents incline to the so-called "historical ratio" of 15 or 16 to 1, although they are afraid to say in so many words that one silver dollar shall by a stroke of the legislative pen be converted into two?

If I were to succeed in obtaining any distinct answer to my first question ; still more, if I may accept the above as the prevailing bimetallic opinion about a ratio, I would follow it up by a second question—viz., "What do bimetallists expect to be the specific effects of the adoption of their proposed ratio on the business of this country and of the world ?" Surely we have a right to an answer to this question also from men who are proposing to revolutionize the system on which our trade has been based for a century or more. Surely we have a right to ask the brilliant leader of the great Conservative party, before he commits himself and his followers to a system which has never been tried, at any rate in this country, to tell us what it is he means to do and what he expects will be the result. For myself I ask the question in perfect good faith, because I do not know and will not attempt to prophesy what would be the effect of attempting to fix by international agreement and legislation a ratio of 15 to 1. It is to me not only a leap in the dark, but a leap into chaos. If such a scheme took effect, there is one consequence I can clearly foresee—viz., that those who own silver, either in mines or in hoards, would be able to make one silver dollar go as far as two now go. An excellent thing for them, no doubt ; but how about their creditors and customers ? As to larger and ulterior consequences I wait for enlightenment.

I will make my questions more definite. The bimetallists are urging a conference of nations for the purpose of settling the question. French holders of silver and American silver-men will undoubtedly propose a ratio of 15 or 16 to 1 ; in other words, to double the present market value of silver, to take a sixpence and call it a shilling, to make one silver dollar worth two. Is this what the bimetallists are willing to

propose or accept on behalf of this country? And if so, will they be good enough further to inform us what they expect to be the effect of this tremendous change on existing currencies; on existing and future contracts; on prices, especially prices of food, clothing, and raw materials; on wages; on the remuneration of capital and the reward of labour; and, above all, on credit?

I challenge them to give explicit answers.

Since the debate in the House of Commons and the uncompromising speech of the Chancellor of the Exchequer the sky has cleared a little, and the hopes or fears of a Bimetallic Conference are for the moment in comparative abeyance. Even in the United States, if I am rightly informed, the danger of concession to the "silver-men" is less than it was. But trade is depressed; suffering interests catch at suggested remedies; and Governments change. Let us hope that when the stalwart form of Sir W. Vernon Harcourt has quitted the stage which he treads with so certain a step, neither the blandishments of a perplexed Indian bureaucracy nor the illusory visions of a suffering Lancashire or Lincolnshire, nor the ingenuities of academic economists will prevail so far upon the philosophy of Mr. Balfour or the hesitations of Mr. Goschen as to induce them to send Mr. Grenfell or Sir William Houldsworth, Mr. Gibbs or Professor Foxwell, to Brussels or to Washington with a commission to inquire of Mr. Jones of Nevada and of the other "silver-men," by whom, as we are told, the United States Senate are to be represented at the proposed monetary conference, how much or how little American silver they are prepared to give for an English gold sovereign.

FARRER.

ABINGER HALL, *April* 16.

BIMETALLISM

AND THE

INDIAN MINTS

XI

BIMETALLISM AND THE INDIAN MINTS

This letter, somewhat shortened, appeared in "The Times" of September 24, 1897

To the Editor of "The Times."

Sir,

1. The Bimetallists have for some time been quiet. They have made no open attack on our own gold standard. They have suggested no ratio between gold and silver. But let us not be too secure. Mr. McKinley, who has carried a tariff contrary to every sound principle of international trade, and peculiarly injurious to the trade between this country and the United States, is now, if we are rightly informed, proposing to our Government an agreement on the subject of currency which would be as injurious as express Bimetallism.

The proposals of Mr. Wolcott and his colleagues, backed by M. Meline, are believed to involve various minor suggestions for the purpose of raising the value of silver. With these I do not propose to deal in this letter. But the main point in the proposals now before our Government relates, no doubt, to the re-opening of the Indian mints, and it is to this proposal, with all its consequences, that I wish to call the early attention of those interested in maintaining our own system of currency.

2. English Bimetallists will no doubt support any proposal for re-opening the Indian mints to silver, regarding it as a step towards International Bimetallism. Lancashire will be strong in favour of such a measure. In London there are, even among supporters of the gold standard, many who disapprove the closing of the Indian mints; a majority of the Agricultural Commissioners, including two members of the Cabinet, have gone beyond the limits of their commission and their competence (see Final Reports, page 160, par. 64) in order to make a special report favouring the re-opening of the Indian mints (page 170, par. 79); Mr. Balfour is known to hold similar views; and even Sir Michael Hicks-Beach has intimated that, under certain conditions, he would be ready to consider the question. The attack, therefore, is one that cannot be treated lightly; and it is important to consider what are the issues which it involves.

3. The present state of the Indian currency is not regarded as a final and permanent arrangement, even by those who advised the closing of the mints. What such an arrangement should be is a matter on which there may be much difference of opinion. Bimetallists will, of course, look to a determination of the gold value of silver by international agreement as the solution of the Indian difficulty. Another view held by many in this country is that India ought to have maintained and still ought to return to her silver currency, and that the inconveniences and difficulties of exchange arising from the growing difference between the standards of value in England and India may be disregarded as unimportant or endured as inevitable. My own view is that the ultimate solution of the question is to be found in the adoption of a gold standard for India.

I mention these alternative courses in order to show how various and how divergent are the possible solutions of the Indian problem. To consider them all completely would be beyond the limits of this letter. My present object is to discuss what we believe to be the proposals of the American Commissioners and of the French Government. But for this purpose it is necessary in the first instance to consider what is the present condition of the Indian currency and under what circumstances it has become what it is.

When in 1878-9 the Indian Government first proposed to close the Indian mints, the question was referred to a Committee, of which Lord Welby and myself were members. In the then state of the silver question and of the exchanges we felt the gravity of tampering with the currency, and unanimously reported against giving effect to the proposal at that time. But silver continued to fall; the exchanges became worse and worse; the Sherman Act was on the point of being repealed; and the Indian Government was plunged in greater and apparently hopeless difficulties. The peculiarity of the Indian case is that fluctuations in exchange have a very serious effect on the Government of the country. That Government is a paternal Government; it provides the country with brains and services from the United Kingdom; it makes railroads; it imports material of all kinds from Europe; and it has incurred a heavy debt to gold countries. For all these things it has to pay in gold, and, being an honest as well as a solvent Government, it neither seeks to shirk its obligations nor to scale down its debts. But it receives its income in rupees, and the chief part of this income arises from rent or land tax, the amount of which is determined for ever or for long periods by the land settlements which have

been made with the natives. The consequence is that the Government requires a larger number of rupees to pay a given gold debt than formerly; e.g., where formerly 1,000 rupees enabled it to pay a gold debt of £100 it may now have to procure 1,500 or 1,600 rupees to enable it to do so. Under such circumstances the Government must either contract the sphere of the work it does for its subjects—which would be most injurious to India—or it must raise additional revenue. The first suggestion that occurs is that it ought to raise more rupees by increasing the nominal amount of its taxes; and there would be some justice in this, since taxation has been substantially lightened by the fall in the value of each rupee which the ryot pays. But to this the land settlements above referred to are an insuperable obstacle, and the evidence given to Lord Herschell's Committee proved that, in the opinion of those best able to judge, any attempt to alter these settlements by increasing the number of rupees payable to the Government would create a most formidable political danger. Under these circumstances it appeared to that Committee, as it had appeared to the Indian Government, that the time had arrived when it had become desirable—even at the risk of tampering with the currency—to counteract the fall which had taken place in the value of silver, by raising the value of the rupee; and for this purpose the mints were closed, with the provision that when by failure of a new supply of coin the value of the rupee had risen to 1s. 4d., the mints should be re-opened for the coinage of rupees to any one who would pay that price in gold for them.

5. This is, I believe, a true account of the motives which induced the Committee to report unanimously in favour of closing the mints. They cannot, however, be fully understood without a careful consideration of

the evidence concerning silver, concerning Indian income and expenditure, concerning the exchanges and their effect on trade, and concerning the present state of the currencies of the world, which the Comimitttee had before them—matters too long to be stated at length in this paper.

6. Of those who joined in the Report there were some who would have inclined to Bimetallism as the ultimate solution of the difficulty, if such a solution had been practicable; whilst others, like Lord Welby and myself, looked to the closing of the mints as a step towards the adoption of a gold standard for India. But all agreed that the existing situation was intolerable; that it was becoming worse and worse; and that it was impossible in the interests of India to refuse a trial of the experiment which the Indian Government had proposed. For that it was an experiment we all of us felt, an experiment open to risk of failure, and adopted only because other courses were open to more serious objections. There are many who think and speak lightly of experiments in currency, but we were not among the number.

7. The experiment was founded on the theory that to contract, or, which is the same thing, to refuse an automatic increase of the currency would, in the course of time, increase its value, and would make the rupee possess a value in exchange greater than that of the silver which it contains. At the same time a limit was set to contraction by providing that the mints should be opened and that there should be an automatic increase so soon as the rupees reached and maintained a value of 1s. 4d. Has the experiment succeeded? Many persons (but certainly neither the Indian Government nor the members of Lord Herschell's Committee) foolishly expected that the rupee

would at once rise to 1s. 4d., and remain of that value. This it did not do—though it at once diverged from silver, and for a very short time was at 1s. 4d.; it then fell, and continued for some time to hold a course parallel to silver; and afterwards again, in 1896-7, again diverged widely. Before the disturbance caused by the recent famine and plague it had reached 1s. $3\frac{1}{2}$d., and now again it stands at about 1s. 4d.[1] This is quite as much as we expected; and gives reason to believe that if the experiment is allowed to continue it will not be very long before a permanent exchange of 1s. 4d. or upwards is established. When that is the case, it will be for the Indian Government to consider whether any and what further steps should be taken in order to secure the maintenance of the exchange at that level, and to give India the benefit of a gold standard and of an automatic currency. What these steps should be it is premature now to consider. The present question is whether the experiment thus commenced should be persevered in, or whether it should, before it has been fairly tried, be abandoned for the purpose of adapting such proposals from foreign nations as I have mentioned at the beginning of this paper.

The results of the experiment are as successful in the present and as full of hope for the future as its advisers expected. But caution and patience are needed. The circumstances which influence exchange are so many, so various, and so conflicting, that we are in constant danger of assuming a permanent alteration in the relation of currencies to each other, when the rise or fall is only due to some temporary and accidental cause. Thus the momentary speculations caused by

[1] See diagram at end of volume showing the relation of the rupee to silver since the closing of the Mints.

the closing of the mints; the temporary withholding of Council Bills from the market in 1893; the Indian plague and famine with their disturbances of the export trade; the extraordinary expenses of the Indian Government, necessitating a limitation of the usual remittances from India, are all circumstances which have to be eliminated before the actual and permanent relation of the rupee to the pound sterling can be determined. Indeed it is the difficulty, I may almost say the impossibility, of accurately eliminating such causes in the case of two countries which have different standards of value, together with the confusions of thought and opinion and the difficulties of action and speculation arising therefrom, which constitutes one principal reason for endeavouring to attain one single standard of value and a permanent and steady par of exchange for the whole trading world, and especially for the British Empire.

For our present purpose it is essential that we should bear this difficulty in mind in order that we may not form too hasty conclusions either as to the success or failure of the experiment of closing the Indian mints. There is clearly no reason for concluding that it has failed, and even more clearly no reason for trying a new experiment unless it can be shown that such new experiment will certainly give India that steady exchange with the United Kingdom which she so much needs.

The experiment proposed by Mr. Wolcott is, as we shall see, a far reaching one, and affects our interests in all parts of the world. But it is with India that our Government is now asked to deal. In dealing with India, we shall all probably agree that the first consideration should be, not the interest of France, or of Germany, or of the United States, or of Lancashire, or

of Agricultural England, or of London, or even the United Kingdom, but that of India.

To treat the interest of India in her own currency as a secondary consideration would be a discredit to the Imperial Government, and to deal with Indian currency as a tub to be thrown over to the whale of bimetallic agitation, whether domestic or foreign, would be a meanness of which I do not believe any British Government is capable.

10. We have no official statement of Mr. Wolcott's proposals; but we may form a shrewd guess at them from the article entitled "Episodes for the Month," in the August number of the *National Review*. From this article, which is written by some one who appears to be in the counsels of the American negotiators, we may gather that India is invited to open her mints by the prospect of "steadiness and permanence of exchange," and that this "steadiness and permanence of exchange" are to be guaranteed by the agreement of the United States and France to open their mints to silver as well as to gold. What is to be the ratio at which they are to be so opened we are not told in so many words. "Wanted, a Ratio" is a point on which Bimetallists are proverbially shy of expressing a direct opinion. But we may gather (see page 802) that the old French mint rate—in other words 15½ to 1—is the ratio proposed; and in all probability this is the only ratio which would satisfy France and the United States.[1]

Let us, at any rate, assume this to be the case, let us assume that it is proposed by the United States and France that they shall open their mints to silver at a ratio of 15½ to 1, and that the British Government

[1] It will be seen that this passage, though written before the publication of the official papers, contains a true description of Mr. Wolcott's proposals.

shall be a party to the arrangement by undertaking to open the Indian mints to silver, and let us consider in the first instance what would be the effect of this proposal on India.

11. It is suggested as a sufficient reason for this step on the part of the British Government that the joint action of the three Governments will secure for India "steadiness and permanence of exchange."

Steadiness and permanence of exchange, and above all things steadiness and permanence of exchange with the United Kingdom is no doubt the thing which India wants; and if this would certainly be attained by the present proposal there would be a *prima facie* case for it. But it is for those who make the proposal to prove their case, and this they have not yet done. When they make the attempt it will be for us to examine their reasons. If, in the meantime, we can show that there are obvious difficulties in the proposal as stated above, and if we can show that there are many chances against the results which the supporters of the proposal promise us, we shall have done enough to prove that our Government ought not, in the interests of India, to think of entertaining the proposal.

Let us proceed to criticise it, so far as, with our present imperfect information, it is possible to do so.

12. The first observation on Mr. Wolcott's proposal as stated above is that we do not know whether India is to be bound not only to open her mints, but to keep them open, whatever happens; nor, which is even more important, do we know whether India is to be bound not to open her mints to gold, or, if not so bound, whether she is to be bound, if she opens them, to open them at any particular ratio. If it is proposed that India shall be so bound, the objection at once arises that it is not right to place the future management of

the currency of our greatest dependency at the mercy of foreign powers. If it is not proposed that India shall be so bound, future trouble may arise. For it may very well happen that it becomes the interest of India to open her mints to gold, and to open them at some ratio other than that of $15\frac{1}{2}$ to 1. If this were to be the case, and if India were to open her mints to gold as well as silver at a ratio of more than $15\frac{1}{2}$ to 1—in other words at a ratio which would make gold as compared with silver more valuable in India than in the United States and France—she would drain those countries of their gold, and they would naturally complain of a virtual, if not a literal, breach of faith.

13. But the most important question is whether the suggested arrangement would secure to India "steadiness and permanence of exchange," and especially "steadiness and permanence of exchange" with Great Britain, which is what India specially needs. Since the ratio proposed by the United States and France is *ex hypothesi* $15\frac{1}{2}$ to 1 or (which is the same thing) 60d. to one ounce of silver—or 1s. 11d. to the value of the silver in a rupee—it must be at that ratio, if at all, that steadiness and permanence are to be secured. As the present ratio is 39 or 40 to 1, or 24d. to the ounce of silver, or 9d. to the market value of the silver in a rupee, it will be seen at once what an enormous change the proposal involves. The present gold value of silver would have to be much more than doubled—it would have to be increased by 125 per cent.—and this value would have to be maintained. Would any such result be really affected by the proposed change? A complete and positive answer to this question could only be given if we were able to foretell exactly what men would do; and since their action would depend, not merely on the actual supply of and demand for the

two metals—a matter involving in itself all kinds of uncertainties—but on the opinion they may form concerning the future of such supply and demand, a matter involving all the potentialities of human hopes and apprehensions, all we can expect to do is to show how numerous are the contingencies and how great are the chances against any such result as is promised by the supporters of the American proposition.

15. In all probability the first effect of any international or legislative action, having for its object to raise the gold value of silver, would be to create in the minds of speculators the belief that some rise would actually take place; and they would put up the price of the rupee; just as on the closing of the Indian mints they put up the value of the rupee to 1s. 4d. This effect would, however, be only temporary, unless subsequently supported by the actual state of the market, and would probably be discounted beforehand if notice were given of the operation before it took effect.

16. On the other hand, there might well be other speculative movements still wider and stronger in their operation, the effect of which would be in an opposite direction.

If it becomes known that, so far as law and international agreement can operate, the gold value of silver is to be more than doubled, and that a gold debt will be dischargeable with less than half the quantity of silver now necessary for that purpose; still more, if it is open to the gravest doubt whether this artificial gold value of silver can possibly be maintained in the future, the effect may be to create a panic, and to cause a run on gold. In such a case gold would be hoarded or exported, as it has been lately in the United States, only to a much greater extent, and the effect of such a panic would be

to drive up the silver price of gold and to drive down the gold price of silver.

Judging from experience such a panic seems extremely probable, and there is no saying to what extent it might not go, or what disasters it might not cause.

17. Passing from these temporary effects of speculative apprehensions, which, however, would be very real and very important in their consequences to the market and to business, let us consider what would be the more permanent effects of the proposed change on the relative values of gold and silver. In other words, we have to ask how the change would affect the supply of and demand for these metals.

18. First then, as to supply. The supply of both the precious metals is proverbially uncertain, and it is useless to attempt anything like a statistical forecast. But so far as we know, the supply of silver appears to be more amenable to the ordinary law of supply and demand than gold, and if this is the case an increased demand for silver would call forth an increased supply more certainly than a diminishing demand for gold would decrease the supply of gold. Should this prove to be the case the effect of raising the gold price of silver would be to call into the market a large additional supply of silver, and this increase would, *pro tanto*, operate to check and prevent the rise in its gold value. This would constitute a serious counteraction to any increase of demand for silver or any increase in its gold value.

19. Next as to the demand for silver. It is proposed to create this by opening the mints of the United States, of France, and of India to silver; those of the United States and France being also open to gold at a ratio of $15\frac{1}{2}$ to 1. I pass over the very important questions which

might arise as to the meaning of opening the mints, and the specific stipulations which would be necessary to effect that object, and will assume that the object of the negotiators is accomplished and that the mints are open. Would the demand thus created be sufficient to alter the ratio from 39 or 40 to 1 to $15\frac{1}{2}$ to 1? No doubt an open mint has, *ceteris paribus*, a tendency to create some demand; but the present circumstances are very peculiar. The United States and France already hold an enormous sum in silver, which circulates for internal purposes at its face value in gold, but which for purposes of sale on the market or of export is not worth more than two-fifths of its face value. The stocks of gold and of silver in the United States and in France were estimated by the Indian Currency Committee as follows: Par. 73–82.

	Gold.	Silver.
United States . .	£131,102,730	£101,157,000
France . . .	171,000,000	140,000,000

India also, as is well known, is saturated with silver, but the Indian Government has no reserve of gold.

First of all, as regards the United States. It is notorious that in that country the circulation is already too large rather than too small. Will the mere opening of her mints to silver create such an additional demand for currency as to absorb the surplus silver of the world and raise its market value by more than one half? What will be the economical motive which will produce such an effect? It is for bimetallists to tell us. It is true, no doubt, that so long as there is gold in the coffers of the United States Treasury, and so long as gold is worth more than $15\frac{1}{2}$ to 1 of silver, silver will be taken by its possessors to the United States mints to be coined, and gold will be taken in exchange at the mint

ratio to be either hoarded or exported to countries where it stands at a higher ratio. But this operation can only last as long as the United States Treasury has gold to part with, and so long as the operation lasts it would show, *ipso facto*, that the ratio of $15\frac{1}{2}$ to 1 was not maintained.

Further, it is to be remembered that the United States have large transactions with England and other gold countries ; and that at any moment, either by failure of their exports, or by cessation of borrowing from Europe, or by return of United States securities from Europe, they might be called on to make large remittances in gold which would reduce their stocks of gold and might ultimately drive them to a silver basis ; in which case, of course, all idea of maintaining the ratio between the United States silver and foreign gold would disappear.

The case of France is so similar that it is needless to go into it in detail. There is every reason to believe that, under present circumstances, neither the United States nor France, nor both united, could possibly, by opening their mints, create such a demand for silver in the markets of the world as would raise its gold value to $15\frac{1}{2}$ to 1 or maintain it at that value.

20. Next as to India. Would the opening of her mints create the necessary demand ? Experience says emphatically "No." When silver first began to fall, and from that time till 1893, her mints were freely open to silver, and many persons thought that her demand would exhaust the market and bring back silver to its old gold value. But it did nothing of the kind. Is there any reason to think that it would do so now ? The circumstances would indeed be less favourable to an Indian demand for silver than they were then ; for the French and American mints would be open to silver,

and would create a competition for that metal which might possibly, especially if the Indian mints were opened to gold, not only prevent silver from flowing into India, but attract silver from India, thus causing an export of the white metal from that country to Europe.

Under these circumstances it certainly remains to be proved that the opening of the mints as proposed would have the effect of steadying Indian exchange with this country; and it seems in the highest degree improbable that the gold value of silver would be thereby raised to and maintained at a ratio of $15\frac{1}{2}$ to 1.

The theory on which the supposed effect of opening the mints is founded appears to be that there is always in every nation an unlimited demand for currency, and that if it is possible to take the metal of which the currency consists to the mint and get it turned into coins which are legal tender, all the metal for which there is not some stronger artistic or utilitarian demand, will be turned into coins, with the ultimate effect of making money plentiful and thereby raising prices. Experience shows that this theory, thus broadly stated, is not true. India, with an open mint, did not import all the silver which Europe had to spare; nor has the enormous recent supply of gold had the effect of raising gold prices. What the true theory may be is too large a question to discuss here; and I only mention the subject for the purpose of suggesting how doubtful are the speculations on the faith of which we are asked to make an enormous practical change.

21. I have discussed the question on the actual facts of supply and demand; but it must be remembered that the effect of the actual facts is at any moment liable to be increased and exaggerated by human apprehension,

and that we have to consider in these delicate matters not only what is, but what men hope and fear. Any apprehension occurring at any time now or hereafter that gold will not be forthcoming to meet possible demands, may create difficulties out of all proportion to the actual want of gold; and a state of things in which a precarious and artificial value was given to silver in the markets of the world would consequently be a perpetual source of danger to the credit both of India and of the United Kingdom, and of the commercial world.

22. There is another possibility, or, as I think, probability, which raises further doubts. I have hitherto assumed that all men in America and France will accept and follow the new law and will agree to make their contracts and receive payment of their debts in the alternative terms of 1 of gold or $15\frac{1}{2}$ of silver. But this is highly improbable. Laws relating to currency have been and are obeyed and followed when they are in accordance with the habits of the people; and it is the present habit of great trading nations to refer their dealings to a gold standard. This was not always so. Till two hundred years ago silver was the standard in general use. But for the last two hundred years the tendency of the world has been to make gold the measure of value. The English people adopted it two hundred years ago in spite of their Government, and other nations and governments have followed them. It is not likely that any such diplomatic and legislative arrangements as now proposed would reverse this tendency and alter men's habits. It is much more likely that American bankers and merchants, most of whom are known in the pleasant language of their opponents as "Gold Bugs," would arrange to make their dealings on a gold basis, and would thus evade the law which gives to silver an artificial gold value.

It is almost certain that this would be the case in international dealings, and it would very likely become the case in all large dealings at home or abroad. I do not stop to point out the confusion which such a state of things would create, and all the evils which would arise from a conflict between law and practice. I mention the point because, if such a state of things existed, it would put an end to all hopes of artificially raising the value of silver. If the persons who deal in gold and silver determine, in spite of the currency laws of their country, to make use of gold and not of silver, the demand will still be for gold and not for silver; and the attempt to fix the value of silver by law must fail.

23. In the above remarks I have tried to show how improbable it is that the proposed arrangements would give to gold and silver in the markets of the world the certain value of $15\frac{1}{2}$ to 1, which is necessary in order to secure to India a "permanent and steady exchange" with this country and with the rest of the world. This, it must be remembered, is the only justification for opening the mints of India to silver; and the only reason why our Government should think of entertaining Mr. Wolcott's proposals. If his plan will not certainly have this effect, it is in the highest degree objectionable on India's account, since it would not only disturb the present promising state of things and renew in an aggravated form the fluctuations in exchange from which she has suffered so much, but it would subject the standard of value and currency of India to the control of foreign governments who have other interests at heart than those either of India or of Britain.

24. Even supposing a ratio of $15\frac{1}{2}$ to 1 to be established and maintained, is it clear that such a change would be for the benefit of India? Would it be for

the interest of India, in the long run, to scale down her gold debt to the enormous extent such a change would involve? Further, there are many persons who complain—with or without cause—that the recent rise in the value of the rupee to 1s. 4d. has checked Indian efforts and injured her trade. What would such persons say to a sudden rise to 1s. 11d. or two shillings? What would be the effect of such a change on the welfare of India?

25. Having disposed of the case of India, let us consider how the proposed change will affect the United Kingdom and all other parts of the British Empire which have a gold standard. If, as we believe, the proposal will not succeed in creating a fixed exchange ratio of $15\frac{1}{2}$ to 1 *cadit quæstio.* But let us for a moment assume that it does succeed. What will be the effect on the British Empire and on all countries which have a gold standard? They will not be asked formally to alter their own standard of value or to pass laws enabling debtors to discharge gold debts with silver at a ratio of $15\frac{1}{2}$ to 1. But the effect will be the same as if they did.

The British Government must, if they adopt the proposed arrangement for India, contemplate as a result that it will determine the relative value of silver and gold throughout the world at a ratio of $15\frac{1}{2}$ to 1. In other words, the effect of the arrangement to which the British Government are invited to become a party will be either to raise the value of silver or to depress the value of gold by more than one half, and this must, of course, be done all over the world—in France and America as well as in India; in London, which is the central market for silver, as well as in Bimetallic countries. It is a change which will alter the effect of all existing contracts to pay in either of the precious

metals. It will enable any man who has silver to part with it for the purpose of paying debts or otherwise at more than twice its present gold value. It will not enable any one to take silver to the English mint and get it turned into coins which will be worth one fifteenth and a half of their weight in gold; but it will enable any one to take silver to the French or United States mints and get it coined into francs or dollars, which will—on the hypothesis that the plan succeeds and that a stable exchange is secured—be worth in the markets of the world and in London as well as elsewhere one fifteenth and a half of their weight in gold. It would enable the United States Government or the French Government, supposing them to owe debts abroad, to use the enormous stocks of silver they possess in paying those debts with less than half the amount of silver with which they could now pay them. It is a change from which the most advanced bimetallists in this country have hitherto shrunk, since they have never dared to advocate a ratio of $15\frac{1}{2}$ to 1. It is a change, which, if possible, could be really good neither for India nor for any other country which values common honesty; it is a change which would be most injurious to this country and to the British Empire. And this revolutionary change would have been effected by the aid, and with the full concurrence of, our own Government! It is impossible to believe that the Government will take any such step.

That our own standard in England would not be expressly altered by this proposed arrangement will make no difference in the effect of the change on English values and English contracts. The effect of the gold terms in which those values are now estimated, and in which those contracts are now made, will have been suddenly and forcibly altered behind the back of the

English public and of the British legislature by an act to which, according to the hypothesis I have made, the British Government would be assenting and approving parties.

It is possible that the same effect might be produced by the united action of foreign governments without the assent of our own Government; but this is extremely improbable. In such an event our Government would not be to blame. But the assent of our Government to Mr. Wolcott's assumed proposal would make them responsible for it.

26. There is much more to be said on the subject of Indian currency, and on its relations to that of the United Kingdom and that of the Empire. But my present business is with the proposals which we believe to have been made on this subject by the French and American Governments, and my immediate object will have been answered if I have shown that these proposals would be fatal to a promising experiment; that they would throw the currency of India into confusion without settling anything; and that, if successful in the sense of doing what the proposers desire, they would introduce Bimetallism in its most insidious and most offensive and most dangerous form, without public discussion and without the consent of the British Parliament. It is impossible to believe that our Government will entertain such proposals at all, much less that they will be guilty of the weakness of throwing them into the Babel of an International Conference.

27. Enough has been said to show that the proposal to steady Indian exchange by opening the Indian mints to silver coupled with a ratio of $15\frac{1}{2}$ to 1 is impracticable, if desirable, and would be undesirable if practicable. For the sake of India and of the British Empire it ought to be rejected as summarily as is con-

sistent with international courtesy. But there is another reason for rejecting it summarily. We are deeply interested in the welfare of the United States, and every mistake that country makes, whilst it may benefit us as commercial rivals, injures us far more as friendly dealers and customers. What she needs above all things is the restoration of a sound system of currency and this she will not get, while the *ignis fatus* of International Bimetallism distracts the attention of her rulers. The sooner we can help to lay that phantom the better for both countries.

FARRER.

CLOSING

OF THE

INDIAN MINTS

XII

CLOSING OF THE INDIAN MINTS

Copy of note attached by Lord Welby and Lord Farrer to the Report of Lord Herschell's Indian Currency Committee, Parl. Paper C. 7,060, 1893, p. 39.

1. In the year 1878 the Government of India made a proposal that the mints should be closed against the free coinage of silver until the rupee should rise in value to 2s. or one-tenth of an English sovereign. In making this proposal, and on other occasions, the Indian Government expressed themselves in very strong terms[1] concerning the dangers and difficulties, present and prospective, caused to India by the fall in silver. A Committee appointed by the Secretary of State, of which we were members, reported unanimously against the above-mentioned proposal, and it was rejected by the Home Government.[2] Further experience shows that, whilst the views expressed by the Government of India concerning the future of silver have been fully justified by the fall which has since taken place, the present condition of India is scarcely such as to justify their estimate of the difficul-

[1] See Despatch of November 9, 1878, par. 22, and Despatch of September 4, 1886, par. 24.

[2] See Treasury letter of November 24, 1879.

ties and dangers to the country which they believed would arise from it.

2. The following facts relating to the recent progress of India are taken from a paper read by Sir W. Hunter (one of the greatest existing authorities on the subject) at the Society of Arts on February, 16 1892.

Between 1881 and 1891 the whole number of the Army had been raised from 170,000 to 220,000, and the number of British soldiers in it from 60,000 to 71,000, or, including reserves, volunteers, &c., to very much more. Many large and costly defensive works had been constructed both on the North-West frontier and on the coasts. In recent years almost all public buildings have been reconstructed on a large scale. Railways, both military and commercial, have been very greatly extended. Notwithstanding these extraordinary expenses, there were, during the 25 years which followed 1862, 14 years of surplus and 11 years of deficit, yielding a net surplus of Rx. 4,000,000. In 1889 the public debt of India, exclusive of capital invested in railways, showed a reduction since the mutiny period of Rx. 26,000,000. The rate at which India can borrow has been reduced from 4 or 5 per cent., to a little over 3 per cent. The revenue of India, exclusive of railways and municipal funds, has grown between 1856-57 and 1886-87 from Rx. 33,378,000 to Rx. 62,859,000, and in 1891 it had increased to Rx. 64,000,000, or including railways and irrigation receipts to Rx. 85,750,000, and this increase is due to the growth of old revenue rather than to new taxation. Further, whilst the rent or land tax paid by the people has increased by one-third, the produce of their fields has more than doubled, in consequence partly of higher prices, and partly of increase in cultivation. Further, in 1891 there were nearly 18,000 miles of railway open,

carrying 121,000,000 of passengers and 26,000,000 tons of goods, and adding a benefit to the people of India, calculated as far back as 1886, at Rx. 60,000,000. Further, the Indian exports and imports at sea, which, in 1858, were about Rx. 40,000,000, amounted in 1891 to about Rx. 200,000,000, and the produce thus exported has increased in quality and variety no less than in amount.

3. Considering facts such as these, we should even now have difficulty in recommending the closing of the Indian mints against the free coinage of silver, if it were not for the circumstance that a further heavy fall in silver is possible, and in certain contingencies imminent, and that any such fall may bring with it mischiefs and difficulties much greater than any which have yet been experienced.

4. Under these circumstances, having regard to the part we have already taken in this matter, as well as to the present exigencies of the case, we are anxious to state, more fully and explicitly than is done in the Report we have signed, what is the full effect of the immediate step which we have agreed in recommending, and what precautions are, in our opinion, desirable with a view to its ulterior consequences.

The step recommended is, that the Indian Government should be empowered to close the Indian mints against the free coinage of silver until the rupee rises in value so as to stand at a given ratio with the sovereign, such ratio to be little above the ratio which has recently been current, say 1s. 4d., and that they should then be required to give rupees at that ratio for all gold brought to their mints. The immediate effect of this step will be to alter the Indian measure of value. As long as the Indian mint is open, the measure of value is the market value of the weight of silver contained in

the rupee, but as soon as the mint is closed we can no longer be sure that this will be the case. Further, so soon as the rupee has risen to the given ratio, the fraction of an English gold sovereign represented by 1s. 4d. will become the measure of value. This is in itself a most important change.

5. To alter the measure of value by substituting one metal for another is at all times a matter of great gravity, and to do so at a time when the relations between the two metals are in a state of constant fluctuation renders the alteration still more serious.

6. At the same time, it is to be observed that the step which we recommend will produce the least possible immediate change. Its object is not so much to raise the gold value of the rupee, as to prevent a further fall. It does not materially alter the present relations between debtor and creditor, but, on the contrary, prevents those relations being altered in the future by a further fall. Moreover, it provides a means whereby in case there should be a demand for currency, that demand will be supplied automatically, and not at the discretion of the Indian Government.

7. This closing of the mints is, however, only the first step in the process contemplated by the Indian Government, and that process will not be complete until gold is made full legal tender, and is received into the Indian currency as freely as gold is received in England, or as silver is now received in India. This may be effected, either by the free coinage of gold at the Indian mints, or by the free reception, under arrangement with the Imperial Government, of gold sovereigns coined in England or in Australia as legal tender currency of India. When this is done the change will be complete, and India will then have a gold standard of value, and a gold automatic currency, the quantity

of which will depend on the demand for it. What that demand may be is uncertain. Sir D. Barbour estimates the outside of the quantity needed to maintain the gold standard at £15,000,000, or one-fifth in value of the estimated present rupee currency. But, whatever the precise amount, the gold currency is not expected to be more than a small fraction of the actual currency in circulation.

8. This currency will in the main consist of rupees, each of which is intended to circulate, not at the value of the silver contained in it, but at the value of the gold contained in the fraction of the sovereign (1s. 4d.) which it represents. With the exception of the small quantity of gold in actual circulation, the currency of India will thus become a token currency of unparalleled magnitude; and, if the market value of silver should fall considerably, its value would become very much greater than the value of the silver contained in it. Under such circumstances, it will, to a great extent, resemble a paper currency, and, if it were not made exchangeable for gold on demand, would resemble in many respects an inconvertible paper currency. The question then arises whether it is certain that such a currency will be maintained at its gold value without further precautions.

9. It is no doubt true that, until the rupee has risen in value to this adopted ratio, the scheme will not have come into full operation, and that, when it has come into full operation, the restriction placed upon the issue of silver rupees will tend to keep the rupee currency at the fixed gold value. But it may well be questioned whether this restriction is, in itself, a sufficient guarantee that this gigantic token currency will, under all circumstances, be kept at par value. Sir David Barbour himself holds that eventually, if the

scheme is to be successful, gold when required must be given for the rupee, either without a premium or at a small premium.

10. It is of course obvious that a great country like India, if she undertakes a token currency, is under an obligation to maintain its value, and that she ought to discharge that obligation by making it reasonably certain that, where gold is needed in exchange for rupees, it will be possible to obtain it at the fixed ratio.

11. It has been argued that this object might possibly be effected without requiring the Government of India to give gold for silver at that ratio, and without the public confidence in their ability to do this which would arise from their accumulating and possessing a stock of gold available for the purpose. Instances may, no doubt, be selected in which Governments have maintained their inconvertible token currency at, or nearly at, par, without these precautions. But a silver token currency, though not in form a promise to pay, really implies, as we have already said, an obligation to maintain its par value ; and prudence as well as experience suggest that this obligation should be supported by the obvious means of fulfilling it.

12. The obligation on the Government to coin silver rupees when the rupee is at 1s. 4d. does not, in itself, carry with it a corresponding obligation on the Government to give gold for rupees, and is, therefore, if we are right in what we have stated above, imperfect without some expression of that obligation. But that obligation will not arise until the rupee reaches the exchange value of 1s. 4d., and it may therefore not be necessary to provide a reserve of gold before this exchange is reached. This exchange, indeed, may not

be reached at all, and in that case no gold reserve will be needed. But, if the measure operates as we expect, gold will probably flow in, and will replace silver as the reserve against the Government paper issue. If gold thus flows in automatically, the Indian Government will be thereby enabled to accumulate a moderate reserve; but, even if it does not, a reserve should, we contend, be provided before the Indian Government takes the final step of announcing gold as the standard coupled with the correlative obligation to give gold for silver.

13. What amount of gold reserve may be necessary it is difficult to say, but in order to have the desired effect, it must be substantial. Nor, considering that it will in all probability be generally resorted to for purposes of export, it is necessary to decide in what form or in what place it should be kept. The circumstances of India are favourable for the accumulation of the necessary stock. India imports more of the precious metals than she exports; her inhabitants no doubt possess already a stock of uncoined gold; and, if the Indian Government receive gold in payment of debts due to them, gold ought to come to their treasuries.

14. At any rate, the expense necessary to procure and retain the requisite amount is one that cannot be avoided by any government which desires to maintain the credit of its currency, and will be insignificant compared to the loss of which the Indian Government now complain.

15. Under these circumstances, we could not join in the recommendation contained in the Report, without at the same time recommending that the Government of India should, in view of the ultimate adoption of the whole of their plan, be prepared to secure the convertibility of their token silver currency, and should,

with that object, accumulate a sufficient reserve of gold.

16. We think it right to add that the questions, whether gold has become more valuable in itself, or silver less valuable in itself, or whether both movements have taken place, and to what extent each movement has gone, as well as the further question between bimetallism on the one hand and a universal gold standard on the other, are questions of which we have taken no notice, as we do not think that they fall within the scope of the reference to us.

T. H. Farrer.
R. E. Welby.

FALL IN THE VALUE OF SILVER

XIII.

FALL IN THE VALUE OF SILVER.

Extract from the Final Report of the Gold and Silver Commission Parl. Paper C. 5512, 1888, *Part II., pp.* 72 *to* 79, *pars.* 48 *to* 71.

FURTHER QUESTION WHETHER SILVER HAS DEPRECIATED.

48. In the above remarks we have dealt with the fall of the gold price of commodities generally, and have come to the conclusion that the greater part of the fall has resulted from causes touching the commodities, rather than from causes specially affecting gold; but here we are met with the question whether this is true of silver as well as of other commodities.

We have already referred to the striking fact that, whilst gold prices have undoubtedly fallen, silver prices in silver-using countries have not, so far as we can learn from the imperfect statistics of those prices, risen to the same extent.[1] It appears, at any rate, to be true, that the adjustment of prices between gold and silver-using countries has taken the direction of a fall in gold prices rather than a rise in silver prices. These facts would seem *prima facie* to indicate that,

[1] This conclusion is modified by more recent inquiries. See paper by Mr. F. Atkinson in *Journal of Statistical Society*, March, 1897.

whilst gold, as compared with commodities, has risen in value, silver has, comparatively, retained its position ; and they have been relied on as pointing to the conclusion that, as between gold and silver, it is gold which has appreciated, rather than silver which has depreciated.

49. But this conclusion is by no means certain or necessary. It is quite possible, consistently with the observed facts, that both silver and commodities may have fallen in value together, as compared with gold ; and that the result of this concurrent fall may have been to prevent a fall in silver prices, which would have taken place if it had not been for the concurrent fall in the gold value of silver. If this is what has really happened, silver prices in silver-using countries, if not higher, or even if lower, than they formerly were, must now be higher than they would have been but for the fall in the gold price of silver.

Having these two alternatives to choose from, viz., an appreciation of gold on the one hand, and a depreciation of commodities, coupled with a depreciation of silver, on the other, it becomes important to consider with some care what are the special causes which have tended to lower the value of silver, and what effect they have had.

CAUSES TENDING TO LOWER THE VALUE OF SILVER.

50. The first and most obvious of these is the increase in the annual supply which has occurred during the period of the fall in the gold price of silver, and, concurrently with this increase, the diminution in its use owing to the currency legislation of Germany, the Latin Union, and other European countries.

It is remarked, and no doubt plausibly, that if these elements alone be regarded, the reverse phenomena in the case of gold afford as much ground for the assertion that it is by the appreciation of that metal that the changed relation of the two has been brought about, as for the allegation that it has arisen from the depreciating of silver.

51. We shall have occasion hereafter to dwell upon certain other circumstances which must be taken into consideration in estimating whether the causes at work have been sufficient to account for a depreciation of silver so great as that represented by the fall in its gold price.

But it appears to us most important to bear in mind, at the outset, a marked distinction between the position of the two metals so soon as the rupture of the bimetallic tie was complete.

DIFFERENCE IN THE POSITION OF SILVER AND GOLD SINCE 1873.

Silver, as we have pointed out, loosened from its artificial tie to gold, became in the West as well as in the United States a mere commodity and freely subject to all the influences, which, in the case of other commodities, affect their market price.

It may have felt the impulse of causes previously in operation which the existence of the bimetallic link had held in check ; and, independently of a diminution of its use in the countries forming the Latin Union, the circumstance that it had in those countries become a mere commodity, and could no longer be converted at the will of the possessor into coin, would be calculated to depress its value.

But, apart from this, the very fact that apprehension

as to the future value of silver had induced the action of the Latin Union, the fear of further depreciation, the stock of metal thrown on the market by Germany, and the anticipation of further sales by that country,—all these, with other circumstances that might be named, would be manifest as elements affecting the price to be given for silver, and would be likely to lead to its depression. And there would not necessarily be any calculable relation between these causes of depression and the extent to which the price of the metal fell.

For it appears certain, not only that what may be termed sentimental considerations play a large part in determining market prices, but that causes which can logically be shown to be inadequate, or at least cannot be proved to be adequate, may, nevertheless, be the true explanation of a fall in the price of a commodity. A depressed market, in the absence of some new stimulus, generally tends to further depression.

Every element, then, calculated to lower the price of silver, would produce a direct and immediate effect, and one in excess, it may be, of what would reasonably be anticipated from a consideration of alterations in its supply and monetary use alone.

52. With gold, on the other hand, the case is entirely different. To it the mints of all the important civilized countries of the world are open, and these and the great banking establishments are the markets to which it finds its way. It cannot be said to have a market in the same sense as silver.

It is argued, and we admit with truth, that gold is a commodity at Calcutta just as silver is in London. But while London is the great silver market of the world, and the price in that market fixes the general price of the metal, no one can pretend that the same

is true of Calcutta in relation to gold. The latter metal has no central market where it is disposed of by sale, and where the daily quotations of price influence men's minds as to its value and their judgment as to its prospects.

On the assumption then that appreciation of gold has been going on owing to altered conditions in the supply and use of that metal, these causes would operate more slowly and less directly than would the like causes operating upon the silver market, when once it has become fully sensitive to them. The progress of appreciation would not invite attention at the time, and would be seen only in its ultimate effect upon prices. And, in the case of gold, the effects would be accurately measured by the strength of the causes at work, free from, or at all events scarcely affected by, the sentimental considerations to which we have alluded.

Even assuming the alterations in the supply and use of the two metals to be of equal potency, we should not be surprised to find that owing to the difference in circumstances on which we have been insisting, a greater depreciation of silver than appreciation of gold was manifested.

53. There is another consideration of equal or even greater importance to be borne in mind.

We have already in §33 dwelt upon the fact that the circumstances tending to the appreciation of gold have been counteracted or kept in check by other influences operating in the contrary direction.

But, in the case of silver, there have been no such counter influences at work. Economies in the use of metallic money which have tended to diminish the appreciation of gold, so far as they have had any influence at all in the case of silver, must have tended to intensify and increase its depreciation.

54. But the changes in the supply and use of silver need to be considered in connection with the special circumstances under which they have taken place, to some of the most important of which we have yet to allude.

It is in Europe and in America that these changes have occurred; it is the European and American market for silver which would in the first place be affected by them; and it is through that market that their effect must reach the great silver-using countries of the East.

55. It is therefore desirable to consider in the first place the effect of these changes on the silver market in America and Europe, and afterwards to consider the relation of this market to the silver markets of the East.

We have no estimates of the quantity of silver in Europe and America used in the arts. But it is the monetary supplies of the precious metals with which we are more immediately concerned, and of these we have estimates which, though rough, are sufficient for our purpose. Dr. Soetbeer's estimate of the monetary supply of the precious metals in those countries at the end of the year 1885 is as follows, viz.—

Gold	£668,200,000
Silver	392,150,000

the subsidiary silver being estimated in these figures at the value assigned to it by law, *i.e.*, at a value considerably above its value as silver bullion.

Most, if not all, of this gold constitutes a part of the aggregate stock of gold upon which supply and demand operate, and which has to be taken into consideration when we desire to learn the effect of the diminished annual supply of gold or of the increased demand for it.

AMOUNT OF SILVER SUBJECT TO THE INFLUENCES OF SUPPLY AND DEMAND

56. But this is not the case with the silver. The subsidiary silver coinage, to which an artificial gold value is given by legislation, constitutes much the largest part of the silver money of Europe and America; and this portion of the above amount forms no part of the stock in the open market, the value of which is affected by demand and supply. The above stock of monetary silver was distributed as follows according to Dr. Soetbeer's estimate:—

Great Britain	£21,600,000
British Colonies (without India)	3,300,000
Netherlands	13,450,000
Latin Union	160,000,000
Germany	44,600,000
Scandinavian Countries	2,100,000
United States	64,600,000
	£309,650,000
Russia	£14,000,000
Austro-Hungary	18,500,000
Other countries in Europe and America	50,000,000
	£82,500,000

Out of these amounts all or nearly all of the stock of Great Britain and her colonies, Holland, the Latin Union, Germany, Scandinavia, and the United States, consists of subsidiary silver maintained at an artificial gold value, and these subsidiary coinages with an artificial value must therefore be deducted from the total monetary stock of silver in Europe and America before we arrive at the amount of such stock which can be affected by an increase in the annual supply of

silver. The remainder, as will be seen, amounts to considerably less than £100,000,000 in value.

It is this portion alone, so far as money is concerned, which has to be taken into consideration when we desire to learn the effect of the increased annual supply, or of the diminution, if any, in the demand.

57. An increase in the supply of silver of the value of £10,000,000[1] a year, such as has taken place during the last fifteen years, though comparatively unimportant when considered as an addition to the whole stock of silver in the world, or to the whole stock of silver money in the world, or even to the whole stock of silver money in Europe and America, becomes very important when considered as an addition to a stock considerably under £100,000,000.

Even this is an overstatement of the stock of silver subject to these influences. In many of the countries in which it is to be found, the existence of a forced paper currency and the absence of free minting operate so as to prevent its having an ordinary market value.

58. In considering therefore the effect of an addition to the annual supply we must look to the proportion which it bears to the stock of unmanufactured silver and of coins circulating to their full value, rather than at its relation to the total existing stock of the metal.

Even if it should be thought that, in order to arrive at the amount of silver which is affected by the increased supply, we ought to take into consideration the silver used in the arts as well as the monetary stock of silver, the small proportionate amount of the monetary stock still remains a most important factor; and it must be remembered that the value of manufactured silver has been enhanced by the cost of manufacture to an extent largely exceeding its bullion

[1] See figures in Part I., § 12.

value—a fact which diminishes the probability of its coming into the market as bullion.

It is also a material consideration that while there is evidence of the increased demand for gold for use in the arts in Europe and America, there is, according to Dr. Soetbeer, no such evidence in the case of silver.

59. So far, therefore, as Europe and America are concerned, the stocks of silver upon which an increased supply or a diminished demand can operate, are proportionately small, and the increase of annual supply is proportionately large; whilst as regards demand, the actual use of silver in Europe and America, whether for monetary or for other purposes, has either decreased, or, if it has increased, has increased very little. For the reasons to which we have referred in § 51, a comparatively small addition to the supply may produce an effect upon the market quite out of proportion to the extent of the addition.

If then we consider Europe and America alone, there appear to be ample causes to account for a large fall in the gold value of silver, arising from causes affecting silver.

But it is of course to the East, and to the relation of the East to the West, that we must turn for a more complete answer to our question. It is Asia, and India in particular, which always has been, and is, the great absorbent and user of silver; and it is in the trade with Asiatic countries that the divergence between gold and silver is most apparent, and its effects most strongly felt.

It is obvious, therefore, that the East in general and India in particular, whose mints are freely opened to silver, ought to be the principal factors in absorbing any increase of supply and in preventing any considerable lowering of the gold price of silver; and this

is in fact what economists expected when silver first began to fall.

If we can find any cause or causes which have interfered with the operation of the Eastern demand, which have checked the flow of silver from the over-supplied market of the West to the East, or which have lowered the value of the Indian silver currency when measured in gold, we shall have done much to show that the fall in the gold price of silver is, like the fall in the gold price of other commodities, due in the main to causes affecting silver.

60. One of the difficulties of the question has always been to know why a larger demand for silver in the East has not followed on its fall and cheapened cost in the West.

REASONS WHY THE FALL IN THE VALUE OF SILVER HAS NOT CAUSED IT TO FLOW TO THE EAST

When silver first began to fall, it was said that the East, whose mints and markets stood open to silver would take the surplus silver, as it did at the time of the gold discoveries, and that the gold price of silver, would be thus kept at or near its former level.

When it was found that this did not happen, the changes in the relative values of the two metals were attributed by many to the appreciation of gold. For this, it was said, would account for a fall in the gold price both of silver and of commodities, but would not necessarily cause any flow of silver from the West to the East; and it was consequently alleged by those who held this view that this appreciation of gold was the cause both of the lower gold price of commodities and of the lower gold price of silver.

But it is obvious on consideration that the same

effect would be produced on the flow of silver to the East by a fall in the gold price of commodities and of silver, whether that fall was due on the one hand to the appreciation of gold, or on the other to causes which affected commodities and to similar causes which simultaneously affected silver.

FALL OF GOLD PRICES

Let it be assumed that goods have fallen in gold price from causes affecting goods, and that silver has fallen in gold price in Europe from causes affecting silver. It is obvious that as regards articles imported into Europe from the East, the English importing merchant would make no new profit by exporting the cheapened silver and importing Eastern goods, if for the goods he imports he were to receive a gold price as much lowered as the gold price of silver had been lowered. And as regards articles of export to the East, there would be no greater profit in buying and exporting the cheapened silver than in buying and exporting other English articles, such as cotton goods and iron, which have fallen in gold price as much as or more than silver.

In examining the relation of commodities to gold, we have come to the conclusion that the greater part of the fall in the gold price of commodities in general, and among them of the great articles of trade with the East, is due to causes touching the commodities rather than to an appreciation of gold.

If, then, we are right in this conclusion, the fall in the gold price of commodities arising from these causes is itself the reason why the silver in Europe, though cheapened in its gold price from causes affecting silver, has not been exported to the East,

and why such export has not maintained or restored the former gold value of silver.

The calculations which were founded on a notion that a fall in the value of silver in the West must send silver to the East, and redress the divergence between gold and silver, have proved erroneous, not because silver has not fallen, but because other things have fallen as much as or more than silver. It was assumed that other things would be equal, and they have not been equal.

61. The above reasons go far to explain why the increased supply of silver in the West has not been drained off to the great reservoirs of the East.

INCREASED BALANCE OF INDEBTEDNESS OF INDIA TO ENGLAND

But another cause which has probably prevented India from taking silver and which has depressed the silver currency of India in terms of the gold currency of England, is, we think, to be found in the increased indebtedness of India to England on current account; in other words, on the balance of liquidation between the two countries, the operation of which on the gold value of the rupee is no longer checked by any bimetallic tie between the two currencies.

62. We have all of us come to the conclusion that the dissolution of the tie between silver and gold created by the bimetallic system of France and the Latin Union, distinguishes the period subsequent to 1873 from former times, and has left other causes of demand for, and supply of, gold and silver free to act.

So long as the ratio between gold and silver remained approximately stable, the two metals might practically be considered one; and the relations of

exchange between a country with a gold standard, such as England, and a country with a silver standard, such as India, did not differ in any essential particular from the relations of exchange between two countries with a gold standard, such as England and the United States, or England and Australia. A quasi par of exchange was established between the sovereign and the rupee, which though not absolute, as in the case of coins of the same metal, fluctuated within narrow limits.

The peculiarity in the case of England and India is that, independently of the fluctuating balance of trade or indebtedness arising out of current commercial or financial transactions, there is a constant flow of the precious metals, and especially of silver, from America as the country of production, and from England as the great market for the precious metals, to India and the East.

The result of this peculiarity is that alterations in the transport of the precious metals which between two countries having equal access to them would be reciprocal aud alternate, show themselves in the case of India in a greater or a less flow of silver to India, and only in a very extreme case in the entire stoppage or reversal of the flow.

63. In the ordinary case of two countries having the same currency, the exchange is regulated by the current state of liquidation between the two countries.

If England owes more than usual to the United States on account of bad harvests at home and an excessive import of corn, or if England has to make unusual remittances to Australia on account of large loans and advances for railways or other purposes, the effect is at once seen in the exchange, which alters in favour of the United States or of Australia. Bills drawn in

London on New York or on Sydney are at a premium. Bills drawn at those places on London are at a discount. But this premium or discount can never exceed the cost of sending gold from London to those places. If there is a normal flow of gold from those places to England it will be checked, and may be stopped or reversed. The same thing would happen in the opposite direction, if these exports from the United States or Australia fell off, and if the payment of interest on money advanced by England caused the balance of liquidation to turn the other way. But in either case it is the cost of remitting gold which limits the alteration in exchange.

64. Now on the assumption that we are right in our view of the operation of the bimetallic tie, the relations of England and India in regard to exchange were, during the operation of that tie, substantially the same as those of England and the United States, or of England and Australia.

Gold and silver were, for purposes of exchange, one metal; the varying balance of liquidation between the two countries would have the same effect on the exchange as it has in the case of countries having the same currencies; and its effect would be limited in the same manner, viz. by the cost of transmitting bullion, which in this case was silver, and which always, or almost always, as we have seen, travelled in the same direction, viz. from England to India.

If India became more indebted to England upon current transactions, *i.e.* if she had larger remittances than usual to make to England, the effect would be seen in an alteration of the exchange in favour of England. The rupee would fall and the sovereign would rise. But as the two metals were tied together, this rise or fall would, as in the case of England and the United

States, or of England and Australia, be limited by the cost of transporting bullion. If the Indian exchange had fallen beyond a certain point, it would have paid the Indian merchant better to export silver to England than to pay the premium. As a matter of fact, the flow was always from England to India, and therefore the effect of an extreme fall in exchange was to check or stop the flow, not to reverse it. But it was the cost of transport which formed the limit of the fall of exchange. The ounce of silver being always capable of employment at a certain gold value in France, it would always be more advantageous to send silver to France or to keep it there, than to pay an excessive premium on exchange.

65. But when the bimetallic tie was dissolved this state of things was altered.

If the current indebtedness of India increased, if there were more remittances to be made by India to England than by England to India, the exchange would alter as before in favour of England, but there would be no such limit as before to the fall in the gold value of the Indian currency.

The exchange might alter with the balance of liquidation, until an increase in Indian exports, or other alterations in the conditions of trade had satisfied the liability, and every increase in the balance against India would show itself by a fall in the gold value of the rupee.

66. It is not possible to state a complete account between any two countries so as to show, with certainty and accuracy, the balance of liquidation. All that can be done is to give certain known items, and in the case of India these known items are so important, when compared with the unknown, as to justify some confidence in the result.

The following would be the principal items in a complete account :—

LIABILITIES OF INDIA

1. Imports of merchandise.
2. Imports of gold and silver.
3. Freights on exports, minus expenses incurred in India.
4. Private remittances of money and securities from India.
5. Balance of remittances on Government account.

MEANS OF PAYMENT

6. Exports of merchandise.
7. Exports of gold and silver.
8. Private remittances of money and securities to India.

Of these items, those numbered 3, 4, and 8 cannot be procured at all ; but they are probably unimportant, as compared with the others, and there is no reason for thinking that they would materially alter the balance.

As regards the other items, it is to be remembered that in taking those numbered 1, 2, 5, and 6 from the Indian statistics, we include exports to and imports from silver-using countries, as well as to and from England and other gold-using countries. But considering the comparative magnitude of the trade of India with England, and the importance of the item numbered 5 (viz. Council Bills), these considerations will probably not affect the general results indicated by the figures in the accompanying table.

67. These figures show that, so far as we can judge from the items comprised in them, the balance of liquidation has, since 1870, been constantly, though not regularly, against India ; and if the above reasoning is correct, they give a reason why the silver currency of India has become depreciated in terms of English currency, or in other words, why the rupee

has fallen in gold value. They thus furnish an additional reason why the demand of India for silver has not been such as to counteract its fall in gold value in Europe, and why the flow of silver to the East has been checked.

It must not be supposed that India stands alone in respect of the change which we have pointed out in the growing balance of liquidation ; but we refer to it here as bearing upon the demand for silver for the purpose of remittance to that country.

68. If our view is correct, it illustrates the real effect of the Indian Council Bills, which undoubtedly compete with silver as a mode of remittance, and thus have an immediate effect on the silver market. These bills indicate an increased demand for remittances from India to England, and tend to make the demand for such remittances exceed the demand for remittances from England to India. This excess is consequently shown in a fall in the exchange value of the rupee, not now limited as heretofore by the bimetallic tie between gold and silver.

69. It is not to be expected, especially with the imperfect data at our disposal, that the connection between the fall in exchange, the balance of liquidation and the different items constituting the balance, can be traced in detail in the statistics. The various items which help to create the balance of international liquidation are too many and too uncertain to make such a process possible. But there is enough in the above figures to show that the balance against India has been and is on the increase, and that the demands on India have not been completely counteracted by increase in her exports.[1]

[1] It is only fair to state that some of the above figures have been criticised. See Part III. of the Report of the Gold and Silver

70. Nor must it be supposed that the increase in the balance of liquidation, as shown in the exchange value of the rupee, indicates any permanent impoverishment of India. It only shows that for the moment the balance of liquidation is against her. Such a result would in fact be produced if the growing wealth of India enabled her to repay the capital of her gold debt with increasing rapidity. The causes which have led to the existence of an adverse balance of liquidation may, indeed, well have been such as to conduce to her essential prosperity, and enable her to discharge the balance with greater ease.

CONCLUSION THAT THE FALL IN THE VALUE OF SILVER IS MAINLY DUE TO CAUSES AFFECTING SILVER

71. The above are reasons for thinking that the greater part of the fall in the gold value of silver has been due to causes affecting silver rather than to causes affecting gold, and this conclusion fortifies, and is fortified by, the conclusion to which we have already come, that the fall in the gold price of commodities is in the greater part due to causes which affect those commodities rather than to causes which affect gold.[1]

Commission. But I do not think that the criticisms shake the general conclusions.

[1] The continued and continuing fall in the gold value of silver, in spite of the largely increased supplies of gold, the closing of the Indian mints, and the repeal of the Sherman Act in the United States, all tend to support the conclusions stated in the above extracts.—Farrer, 1898.

CURRENCIES OF THE WORLD

XIV

CURRENCIES OF THE WORLD

Extract from the Report of the Indian Currency Committee, Parl. Paper, c. 7,060, 1893, *paras.* 67 *to* 98

DIFFERENT CURRENCY SYSTEMS OF DIFFERENT NATIONS

UNITED KINGDOM

Principles of Currency of the United Kingdom.

67. The present Indian monetary system is substantially modelled on that of the United Kingdom, the essential features of which are,—

1. The standard coin to be of one metal, gold.

2. The mint to be open to the free coinage of this metal, so that the quantity of current coin shall be regulated automatically, and not be dependent on the action of the Government.

3. Token coinage to be of a different metal, or metals, subsidiary to the standard coin, legal tender only to a limited amount, and its face value and the price in the standard metal at which it can be obtained from the mint being greater than the market value of the metal contained in it.

It may be added that, under the Act of 1844, paper

money is convertible on demand into gold, its quantity above a fixed amount varying with the quantity of gold against which it is issued.

Gold formerly considered the Principal Medium of Exchange.

68. Lord Liverpool and other authorities would have added that the standard metal, gold, should be the principal medium of exchange; but this is no longer the fact. Gold is the standard or measure, but for the most part not the medium itself. Though, however, in wholesale transactions, and in a great many retail purchases, gold is no longer the medium of exchange, the use of gold coins is probably greater in the United Kingdom than in most other countries.

69. As regards the stocks of gold and silver (other than mere token money) in the United Kingdom and in India, such information as we have been able to obtain leads to the conclusions contained in the two following paragraphs.

Stocks of Legal Tender Money in the United Kingdom.

70. In the United Kingdom the amount of gold and silver available for the purposes of currency is uncertain; but the mint estimate of the gold in circulation is £91,000,000, of which the amount in banks (including that in the Issue Department of the Bank of England and in other banks against which notes are issued) is stated to be £25,000,000.

There is also the fiduciary issue of notes by the Bank of England and other banks, which at the close of 1892 stood at £27,450,000.

It must, however, be remembered that the gold held

by the Issue Department of the Bank of England, and the gold held by the Scotch and Irish banks in respect of notes issued beyond the authorised limits, cannot be looked upon as an integral portion of the currency, since it cannot be used at the same time with the notes which are issued against it; but the amount is included in the sum of £91,000,000 above mentioned, in order to facilitate comparison with foreign countries which keep a gold reserve against their notes, though not under conditions so strict and specific as those of the English Act of 1844.

INDIA

Principles of Currency in India; Stock of Silver.

71. In the Indian currency system, as established in 1835, silver takes the place which gold occupies in the English system. Cheques, bankers' money, and other credit, have not, in India, replaced the metallic currency to the same extent as has been the case in England.

The Indian mint is open to the free coinage of silver; the rupee and the half-rupee are the only standard coins, and are legal tender to an unlimited amount. It is uncertain what is the stock of rupees in India, but it must be very large; Sir David Barbour says the amount in active circulation, in which of course the hoards are not included, has been recently estimated at Rx. 115,000,000; and by some writers it has been placed much higher. Mr. F. C. Harrison, who has taken great pains in the investigation, puts it at Rx. 134,170,000, besides Rx. 30,000,000 of the coins of native States.

Gold is not legal tender, and there are no current gold coins.

There is a subsidiary silver fractional exchange which is legal tender only to the limit of one rupee.

Paper money may be issued to the amount of 80,000,000 rupees against securities; and beyond this only against a reserve of coin or bullion deposited. The amount of notes so issued was Rs. 26,40,18,200 on the 31st of March, 1893, and the reserve was constituted as follows:—

Coin	Rs. 17,53,85,744
Bullion	86,82,456
Securities	8,00,00,000

For the purposes of the paper currency India is divided into circles, at present eight in number. The notes are legal tender for five rupees and upwards within the circle for which they are issued, and are convertible at the office of issue, and (except in the case of British Burma) at the principal city of the Presidency to which the circle of issue belongs.

Other Countries: Principle of Currency, and Stocks.

72. When we proceed to examine the currencies of other countries we find that many of the conditions which have been considered essential in the English and Indian currencies are either wanting altogether, or have been replaced by other conditions. The following is a short statement of the most important features in these currencies, and of the stock of gold, silver, and notes, available for currency, so far as we have been able to obtain them, as they stood at the close of 1892; but we must guard ourselves against being supposed implicitly to accept all the figures.

UNITED STATES

73. The standard is gold, and the mint is open to gold.

There is little gold coin in circulation, at any rate in the Eastern States, but a large reserve of gold in the banks and in the Treasury.

Stock in the banks	£82,250,440
,, Treasury	48,852,290
Silver dollars in the Treasury . .	70,948,080
,, ,, in circulation . . .	12,334,490

And these, or the certificates issued against them, circulate at a gold value at the old ratio of 16 to 1.

There was also in the Treasury, of silver bullion, an amount valued at £17,874,430, against which paper certificates are issued, which circulate at a gold value at the same ratio.

The aggregate paper currency in the United States was about £210,000,000.

The silver currency and paper based on silver are accepted as legal tender to any amount, and there is no premium on the gold and gold certificates in comparison with them.

Silver Maintained at Ratio 16 *to* 1.

74. In this case a very large amount of silver, or certificates representing such silver, has hitherto been kept in circulation, at the ratio of 16 to 1. But there is considerable apprehension concerning the difficulties which may arise if the compulsory purchase of silver by the Treasury for currency purposes should continue. Under the Bland Act, passed in 1878, these purchases amounted, as above stated, to about 20,600,000 ounces in the year; whilst under the Sherman Act, which was passed in 1890, these purchases have been increased to an annual amount of 54,000,000 ounces.

CANADA

75. The standard is gold; but, though there is a provision for coining gold dollars at the rate of $4{\cdot}86\frac{2}{3}$ to the British sovereign, that is, at the ratio of 16 to 1, there is no Canadian gold coin, and little or no gold coin in circulation.

Canada has no mint. Fractional silver currency is supplied from England.

The stock of gold is said to be about £2,400,000.

There are about £3,700,000 worth of Dominion notes of various amounts, from 25 cents up to 4 dollars; and the banks may issue notes for 5 dollars, or any multiple there of, to an amount not exceeding their "unimpaired paid-up capital," such notes being redeemable in specie or Dominion notes; the present issue is about £7,006,000.

The Dominion notes (unless it be for small amounts) are redeemable in "coin current by law in Canada," that is, in such dollars as above mentioned. The American silver dollar circulates at par, at the ratio of 16 to 1, although a Government proclamation was issued in 1870 declaring it to be legal tender up to the amount of 10 dollars, but only at 80 cents per dollar.

Silver is not convertible into gold.

Notes and Silver at Gold Value of United States.

76. This is a very remarkable case, since, without any gold currency, and without even a mint for gold, dollar notes and silver dollars circulate at the United States gold dollar value.

WEST INDIES

77. All the West India Islands and British Guiana have adopted the English currency, gold being the

standard, but silver being a legal tender without limit. In practice, British gold is never seen there, but the circulating medium consists of shillings and Colonial bank notes. Except in British Honduras, no silver dollars are legal tender, but gold doubloons remain legal tender at 64 shillings (the rate fixed in 1838) throughout the West Indies.

In Jamaica and Trinidad, gold doubloons and United States gold coins are not uncommonly seen; they come from the Isthmus and Venezuela, and go to New Orleans and New York in a steady current.

In the Bahamas the United States gold dollar (worth 4*s.* 1·316*d.*) is popularly over-rated at 4*s.* 2*d.*, and consequently American eagles circulate freely (or did so until notes were introduced).

British Honduras has as its standard the silver dollar of Guatemala, which is a five-franc piece without any gold behind it.

Silver Token Currency at Gold Value.

78. This is an instance of a gold standard without gold, and a silver token currency circulating to an unlimited extent at a value based on that gold standard.

GERMANY

79. Germany, in adopting a gold standard in 1873, adopted most of the features of the English currency system. The mint was opened to gold, and a subsidiary silver token coinage was introduced, limited in quantity by reference to population, and legal tender only to a limited amount. The peculiarity of the case of Germany is that £20,000,000 worth of old silver thalers are retained in circulation at a ratio of 15½ to 1, and are legal tender to an unlimited extent. Of the

new coinage of gold, the banks hold £34,250,000 in addition to £6,000,000 stored at the fortress of Spandau, while the amount in circulation is estimated to be from £65,000,000 to £70,000,000.

The amount of paper currency issued is £6,000,000 by the Imperial Government, £53,790,000 by the Reichsbank, and £8,950,000 by other banks, making a total of £68,740,000.

Resembles that of United Kingdom.

80. On the whole, the German system approximates more closely than any other to our own, though it is said that there are not equal facilities for obtaining gold for export.

SCANDINAVIA

81. The standard has been gold since 1873, and the mints appear to be open to gold, but there is little gold in circulation. Bank-notes convertible into gold are the ordinary currency.

Silver is only subsidiary token currency. The stock of gold held by the banks appears to be about £5,500,000, and of notes about £13,000,000.

THE LATIN UNION

(a) France

82. The mints are open to gold.

Silver coinage, except of subsidiary coins, has since 1878 been, and is now, prohibited, under the rules of the Latin Union.

There is a large quantity of gold in actual circulation.

The peculiarity of the French currency is the large amount of 5-franc pieces, which circulate at the old

ratio of $15\frac{1}{2}$ to 1. They are legal tender to any amount, and are accepted as freely as the gold coin. They are not legally convertible into gold.

The stock of currency appears to be as follows:—

Gold, about	£171,000,000
Silver	140,000,000 [1]
Notes	132,000,000

The notes of the Bank of France are convertible into gold or silver, at the option of the bank. The bank pays gold freely for home use, but, if gold is required in large quantities, especially for exportation, special arrangements must be made.

There is no difficulty in maintaining either the silver or the notes at their gold value.

Gold Standard with much Silver Circulating at Gold Value.

83. Here is a currency which for all practical purposes appears to be perfectly sound and satisfactory, but which differs from our own in most important particulars. It is sometimes called "étalon boîteux," or limping standard, but, inasmuch as the mint is open to gold, and closed to silver, the standard is really gold, whilst a very large proportion of the currency is either inconvertible silver or notes payable (at the option of the bank) in silver or gold, maintained without difficulty at the above-mentioned artificial ratio.

(b) Belgium

84. The mint is open to gold.

The rules as to 5-franc pieces, as to the ratio between gold and silver, and as to legal tender, are the same as in France.

[1] M. Foville puts this at not more than £100,000. See *Financial News*, August 28, 1893.

The stock of currency appears to be as follows :—

Gold, about	£5,000,000 or more
Silver, 5-franc	8,000,000
Notes	15,000,000

The notes appear to be convertible into either gold or silver, at the option of the bank.

85. The situation is the same as in France ; but inconvenience might be experienced if the Latin Union were to be terminated, and the several members were obliged, under the conditions imposed by that Union, to liquidate in gold their silver currency held by France.

(c) Italy

86. The mint is open to gold.

The rules as to 5-franc pieces, as to the ratio between gold and silver, and as to legal tender, are the same as in France.

The stock of currency appears to be :—

Gold	£23,600,000
Silver, 5-franc pieces	4,000,000
Notes	57,000,000

There is very little metallic coin in actual circulation ; the paper is at a discount, and the exchange below par.

87. The state of this currency is unsatisfactory, not, however, on account of the artificial ratio between gold and silver, but on account of the want of both metals, owing probably to the state of the finances and credit of the country. The same difficulty would arise as in Belgium if the Latin Union were terminated.

HOLLAND AND THE DUTCH EAST INDIES

History of Adoption of Gold Standard.

88. From 1847 to 1873 Holland and its dependencies had the single silver standard. In consequence of the changes in Germany and other countries in the north of Europe, which adopted the gold standard in 1873, Holland suspended the coinage of silver in that year. Silver could no longer be brought to the Dutch mint, and gold coin could not be issued, because the Dutch Parliament had not agreed on a gold coin or a gold standard. There was a certain quantity of silver coins in circulation, and their value, at this period, was regulated neither by the market value of gold nor by that of silver. The demand for coin was increasing in the years 1873 to 1875; and the result was that, whilst the value of silver, as a metal, was going down in the market, Dutch silver coins were appreciated as against gold. The rate of exchange on London, which oscillates now on the gold basis between 12.1 and 12.3 florins to the £ sterling, shrank to 11.12 florins.

In 1875 the gold standard was adopted, at a ratio of $15\frac{5}{8}$ to 1, and the Dutch mint was opened to gold; whilst the coinage of silver, except of subsidiary token coins, was prohibited, and remains so at the present time. A considerable quantity of gold coin was minted, which was, however, kept in reserve, and not used for internal circulation. Silver florins, at the gold value, were legal tender to any amount; and with paper florin notes, which were also at a gold value, formed the internal circulation of the country. Neither silver nor paper is convertible into gold; but the Netherlands Bank has always been willing to give gold for exportation. In 1881 and 1882 the balance of trade turned against Holland, and the stock of gold

ran down to about £600,000. Under these circumstances an Act was passed in April, 1884 which enabled the Government to authorise the bank to sell, at market prices, a quantity of 25,000,000 silver florins whenever the state of the currency might demand it. This Act has never been brought into operation, but it has restored confidence; the necessary stock of gold, amounting now to upwards of £5,000,000, has been maintained; the bank gives gold freely for export; and the exchange has continued steady, at from 12.1 to 12.3 florins to the £ sterling. No difficulty has been experienced either in Holland or in her Eastern dependencies. The system of currency has always been, and still is, the same in both. There is no mint, and little or no stock of gold, in Java; and, at the same time, the rate of exchange between Java and Europe is always at or about par. It should be added that Java merchants can always do their business with gold countries through Holland.

The stock of currency is as follows:—

	In Holland £	In Java £
Gold, about	5,200,000	500,000
Silver	11,000,000	2,773,000
Paper	16,000,000	4,250,000
	27,000,000	27,000,000

Gold Standard with Silver and Paper Currency.

89. This is a case in which the standard is gold, with little or no gold in circulation. The silver is kept at an artificial ratio, much higher than its market value, although neither it nor the paper is convertible into gold except for purposes of export. This artificial exchange is maintained in the Dutch East Indies, where there is little or no gold, as well as in Holland, where there is a limited stock.

AUSTRIA-HUNGARY

History of Adoption of Gold Standard.

Year	Annual Average of Exchange on London in Vienna	Average Price of Bar Silver per oz. in London (Pixley and Abell)
		d.
1873	110·89	$59\frac{1}{4}$
1874	110·91	$58\frac{5}{16}$
1875	111·78	$56\frac{7}{8}$
1876	121·32	$52\frac{3}{4}$
1877	122·17	$54\frac{13}{16}$
1878	118·99	$52\frac{9}{16}$
1879	117·30	$51\frac{1}{4}$
1880	117·83	$52\frac{1}{4}$
1881	117·83	$51\frac{11}{16}$
1882	119·60	$51\frac{5}{8}$
1883	120·00	$50\frac{9}{16}$
1884	121·89	$50\frac{5}{8}$
1885	124·92	$48\frac{5}{8}$
1886	126·01	$45\frac{3}{8}$
1887	126·61	$44\frac{5}{8}$
1888	124·22	$42\frac{7}{8}$
1889	119·55	$42\frac{11}{16}$
1890	116·05	$47\frac{11}{16}$
1891	116·80	$45\frac{1}{16}$
1892	119·29	$39\frac{13}{16}$

90. Before 1879 the standard coin was the florin, which was equal to $\frac{1}{45}$ part of a pound of fine silver. The mint was open to silver, and silver florins and silver florin notes were legal tender to an unlimited amount. The actual circulation consisted of florin notes, which were inconvertible; their amount was £52,500,000 in 1879, and £69,500,000 at the beginning of 1892. The average exchange on London for £10 sterling was 141·78 in 1861,[1] after the Italian war. It became 109 in 1865, but rose to 125·98 in 1867, after the Austro-Prussian war. It fell to 110·53

[1] Table given by M. Soetbeer (see Appendix to Gold and Silver Commission's Report, p. 209), which differs slightly from the figures of exchange on London given above, which have been furnished by the Anglo-Austrian Bank.

in 1872, continued at 111 till 1875, but rose to 122·25 in 1877, 117·89 in 1878, and 116·63 in 1879. It seems that in the earlier years there had been a premium on silver, the paper money being depreciated below its face value, so that no silver was brought to be coined. But silver fell in price from $59\frac{1}{4}$ per oz. in 1873 to $51\frac{1}{4}$ per oz. in 1879; the notes ceased to be depreciated; and, as the Austrian mint was open to silver, it became worth while to bring silver to the mint to be coined; so that, between August 1878 and November 1879, the silver circulation had increased to £7,000,000. Under these circumstances the Austro-Hungarian Government, in March, 1879, stopped the coinage of silver on private account, but continued coining it at their own discretion. The quantity so coined between 1880 and 1891 appears to have amounted to $125\frac{1}{2}$ millions of florins. This state of things continued till 1891, when the Austro-Hungarian Government determined to propose the adoption of a gold standard, and to open the mint to gold; for which the necessary measures were passed by the Austrian and Hungarian Legislatures in August, 1892. From 1879, when the mints were closed against the private coinage of silver, the average exchange for £10 sterling rose from 117·83 fl. in 1880, 1881 to 126·61 fl. in 1887, and then fell to 116·80 in 1891, and 119·20 in 1892. The whole oscillation between 1879, and when the mints were closed, down to 1891, when the resolution to adopt a gold standard was taken, was less than 9 per cent., and at the end of the period it stood at nearly the same figure as at the beginning, though in the meantime the price of silver had fallen by nearly 12 per cent., and in 1891 it was more than 6d. per oz. lower than in 1879. The basis for conversion to a gold standard, which appears

to have been founded on an average of this exchange, is a ratio of 18·22 silver to 1 hold, or 1 gold florin = 2 francs 10 centimes, making 120·1 florins equal to £10. The mint is now open to gold.

The Austrian Government have now at their command a reserve of about 351,000,000 florins (or nearly £30,000,000) in gold, and it appears to be intended that a certain quantity of paper and of silver florins shall be withdrawn from circulation, and that the paper florins remaining in circulation shall be convertible into gold.

Parity of Exchange Maintained by Closing Mints.

91. This is a very remarkable case. The fall in exchange, which would have accompanied or followed the fall in the market value of silver, has been averted by closing the mints against free coinage of silver. Fair steadiness of exchange has been maintained for more than a decade, although the paper currency was incontrovertible, and silver was coined on Government account alone; and in the end, a law has been passed for the adoption of a gold standard, a gold reserve has been accumulated, and the mint has been opened to gold.

A fractional subsidiary coinage of silver is provided for, but the currency will probably consist, in the main, of paper notes convertible into gold.

BRAZIL

Parity of Forced Paper Currency Maintained.

92. The case of Brazil is perhaps the most remarkable of all, as showing that a paper currency without a metallic basis may, if the credit of the country is good, be maintained at a high and fairly

steady exchange, although it is absolutely inconvertible, and has been increased by the act of the Government out of all proportion to the growth of the population and of its foreign trade. The case, it need hardly be said, is not quoted as a precedent which it is desirable to follow.

The Brazilian standard coin is the milreis, the par gold value of which is 27d. A certain number were coined, but have long since left the country, and the currency is and has since 1864 been inconvertible paper. The inconvertible paper was more than doubled between 1865 and 1888, but the exchange was about the same at the two periods, and very little below the par of 27d. It had gone down to 14d. in 1868, the date of the war with Paraguay, but had risen again, and was in 1875 as high as 28⅜d. In 1869, when the quantity of paper money was increased from £12,468,000 to £18,322,000, the mean rates of exchange showed an advance of about 11¾ per cent. Since the revolution, which displaced the Empire and established the Republic, the paper issues of the banks were increased by more than £30,000,000 in less than three years, so that the paper issue in 1892 amounted to £51,372,700, and, as the result of this, and of diminished credit, the exchange in that year ranged from 10¼d. to 14¾d.

RESULTS OF EXAMINATION OF DIFFERENT SYSTEMS OF CURRENCY

Parity of Exchange Maintained Under Various Circumstances.

93. It is impossible thus to review foreign systems of currency without feeling that, however admirable may be the precautions of our own currency system, other nations have adopted different systems which appear to have worked without difficulty, and have

enabled them to maintain for their respective currencies a gold standard and a substantial parity of exchange with the gold-using countries of the world, which has, unfortunately, not been the case with India. This has been effected under all the following conditions, viz. :—

(*a*) With little or no gold coin, as in Scandinavia, Holland, and Canada.

(*b*) Without a mint or gold coinage, as in Canada and the Dutch East Indies,

(*c*) With a circulation consisting partly of gold partly of over-valued and inconvertible silver which is legal tender to an unlimited amount, as in France and other countries of the Latin Union, in the United States, and also in Germany, though there the proportion of over-valued silver is more limited, the mints in all these countries being freely open to gold, but not to silver, and in some of them the silver coinage having ceased.

(*d*) With a system under which the banks part with gold freely for export, as in Holland, or refuse it for export, as in France.

(*e*) With mints closed against private coinage of both silver and gold, and with a currency of inconvertible paper, as has been temporarily the case in Austria.

(*f*) With a circulation based on gold, but consisting of token silver, which, however, is legal tender to an unlimited extent, as in the West Indies.

The case of Holland and Java is very remarkable, since in that case the gold standard has been maintained without difficulty in both countries, although there is no mint in the Dutch East Indies, no stock of gold there, and a moderate stock of gold in Holland ;

whilst the currency consists of silver and paper legally, and practically inconvertible into gold, except for purposes of export. The case of Canada, which maintains a gold standard without a gold coinage, is also very remarkable.

Austria-Hungary compared with India.

94. The case of Austria-Hungary is also interesting, and presents a remarkable contrast to that of India, as will be seen from the following table :—

Year	Average Value of Florin, deduced from the Table of Exchange on London in Vienna, given at paragraph 90.	Average Value of Rupee in London, for Bills on India (for Official Years 1873—74, etc.)	Comparison of the two Tables, taking the First Year as equal to 100.	
	d.	*d.*	Austrian Florin	Indian Rupee
1873	21·64	22·35	100	100
1874	21·64	22·16	100	99·13
1875	21·47	21·63	99·21	96·76
1876	19·78	20·51	91·40	91·75
1877	19·64	20·79	90·76	93·02
1878	20·17	19·79	93·21	88·56
1879	20·46	19·96	94·55	89·31
1880	20·37	19·96	94·13	89·28
1881	20·37	19·89	94·13	89·01
1882	20·07	19·52	92·74	87·36
1883	20·00	19·54	92·42	87·41
1884	19·69	19·31	90·99	86·39
1885	19·21	18·25	88·77	81·67
1886	19·05	17·44	88·03	78·03
1887	18·96	16·90	87·62	75·60
1888	19·32	16·38	89·28	73·28
1889	20·08	16·57	92·79	74·12
1890	20·68	18·09	95·56	80·93
1891	20·55	16·73	94·96	74·86
1892	20·12	14·98	92·98	67·04

It will be seen that a country with a silver standard, and a currency consisting partly of over-valued silver but chiefly of inconvertible paper, has been able, by closing its mints against private coinage for a series of years, and whilst still continuing to coin silver on Government account, to maintain a fairly steady rate of exchange with gold-using countries for a considerable period, preparatory to adopting a gold standard.

Russia.

95. Concerning the currency of Russia we have less information than in the case of other countries. But it appears that there is little or no silver or gold coin in the country, and that the currency consists of inconvertible paper roubles, based on silver. The Russian mint is now closed against the coinage of silver on private account. It is an interesting fact that the paper rouble, being in form a promise to pay silver, is now, owing to the fall in silver, exchanged for a higher value in gold than the silver which it promises to pay. Taking silver at 38d. per ounce, the silver rouble would be worth 23·774 pence, whilst the paper rouble is quoted at 25 pence. We have already called attention to a similar experience in the case of Austria-Hungary. The phenomenon can, of course, only arise when the amount of the paper currency is limited.

Result of the above Precedents.

96. It would thus appear that it has been found possibe to introduce a gold standard without a gold circulation; without a large stock of gold currency; and even without legal convertibility of an existing silver currency into gold. Before concluding, however, that these precedents are directly applicable to the condition of things existing in India, it is necessary to examine them carefully. There is no one of the countries above referred to in which silver has been so largely and so exclusively used as in India during the last half-century; and in most of them the people have been for long accustomed to deal with their silver coins on the basis of a double standard. To the Frenchman 5-franc pieces, to the American dollars, have for generations

been not only so much silver, but the equivalent of a certain quantity of gold; and it would have been a shock to his habits and mode of thinking to treat them otherwise. It may be easier to maintain an old and well-known silver currency at a gold value in countries which have been bimetallic, and in which large quantities of gold and silver are already in circulation, than to introduce such a system into a mono-metallic silver country such as India. The case of Austria-Hungary again differs from that of India in some important particulars. In Austria-Hungary the standard was silver with an inconvertible paper currency, and the state of this paper currency was probably one of the chief factors which made a fundamental change necessary. In making the change the relation of Austria-Hungary to the neighbouring countries, was, no doubt, an important consideration, and the fact that Germany and other States had adopted a gold standard rendered it expedient to take a similar course.

Holland and her Dependencies.

97. Even in the case of Holland and its East Indian Colonies, which is *prima facie* very much in point, there are differences which detract from its value as a precedent for India. At the time the change of standard was adopted, the relative values of silver and gold had not parted as they have since done; and, as regards Java, it must be borne in mind that, although it is an Eastern country dealing largely with silver-using countries, it has always had the same standard and the same currency as Holland, the change being made in the standard of both at the same time.

General Conclusion.

98. On the whole, it seems to us that, whilst the differences we have pointed out prevent the cases of the countries referred to from being applicable in all respects as precedents to the case of India, and the circumstances of each particular country must be studied, yet the experience derived from the currencies of those countries is not without value as bearing on the questions which we have to consider, and is important as showing under what various conditions the exchange value of a currency may be maintained.

APPENDIX—No. I.

PRODUCTION OF GOLD AND SILVER IN THE WORLD SINCE THE DISCOVERY OF AMERICA.—Extracted from the last Report of the Director of the United States Mint.

(*From* 1493 *to* 1885 *is from a table of averages for certain periods compiled by Dr. Adolph Soetbeer. For the years* 1886 *to* 1896 *the production is the annual estimate of the Bureau of the Mint.*)

Note.—The dollars have been converted into £'s sterling at the rate of $4·867 to the £ sterling.

Periods	Gold: Total for the Period: Fine Ounces	Gold: Total for the Period: Value in £'s	Gold: Annual Average for the Period: Fine Ounces	Gold: Annual Average for the Period: Value in £'s	Gold: Annual Average Value. By Decades	Silver: Total for the Period: Fine Ounces	Silver: Annual Average for the Period: Fine Ounces	Percentage of Production By Weight: Gold	Percentage of Production By Weight: Silver
1493–1520	5,221,160	22,176,084	186,470	792,003	—	42,309,400	1,511,050	11	89
1521–1544	5,524,656	23,465,174	230,194	977,716	—	69,598,320	2,899,930	7·4	92·6
1545–1560	4,377,544	18,592,973	273,596	1,162,061	—	160,287,040	10,017,940	2·7	97·3
1561–1580	4,398,120	18,680,296	219,906	934,015	—	192,578,500	9,628,925	2·2	97·8
1581–1600	4,745,340	£20,155,126	237,267	1,007,756	—	269,352,700	13,467,635	1·7	98·3
1601–1620	5,478,360	23,268,543	273,918	1,163,427	—	271,924,700	13,596,235	2	98
1621–1640	5,336,900	22,667,762	266,845	1,132,388	—	253,084,800	12,654,240	2·1	97·9
1641–1660	5,639,110	23,951,305	281,955	1,197,565	—	235,530,900	11,776,545	2·3	97·7
1661–1680	5,954,180	25,289,501	297,709	1,264,475	—	216,691,000	10,834,550	2·7	97·3
1681–1700	6,921,895	29,399,630	346,095	1,469,981	—	219,841,700	10,992,085	3·1	96·9
1701–1720	8,243,260	35,011,917	412,163	1,750,596	—	228,650,800	11,432,540	3·5	96·5
1721–1740	12,268,440	52,108,280	613,422	2,605,414	—	277,261,600	13,863,080	4·2	95·8
1741–1760	15,824,230	67,211,013	791,211	3,360,551	—	342,812,235	17,140,612	4·4	95·6
1761–1780	13,313,315	56,546,332	665,666	2,827,317	—	419,711,820	20,985,591	3·1	96·9
1781–1800	11,438,970	48,585,165	571,948	2,429,258	—	565,235,580	28,261,779	2	98
1801–1810	5,715,627	24,276,145	571,563	2,427,614	2,427,614	287,469,225	28,746,922	1·9	98·1
1811–1820	3,679,568	15,628,313	367,957	1,562,831	1,562,831	173,857,555	17,385,755	2·1	97·9
1821–1830	4,570,444	19,412,163	457,044	1,941,216	1,941,216	148,070,040	14,807,004	3	97
1831–1840	6,522,913	27,705,157	652,291	2,770,516	2,770,516	191,758,675	19,175,867	3·3	96·7
1841–1850	17,605,018	74,774,604	1,760,502	7,477,460	7,477,460	250,903,422	25,090,342	6·6	93·4
1851–1855	32,051,621	136,134,374	6,410,324	27,226,875	27,388,145 (1851–1860)	142,442,986	28,488,597	18·4	81·6
1856–1860	32,431,312	137,747,072	6,486,262	27,549,414		145,477,142	29,095,428	18·2	81·8
1861–1865	29,747,913	126,349,702	5,949,582	25,269,940	25,950,585 (1861–1870)	177,009,862	35,401,972	14·4	85·6
1866–1870	31,350,430	133,156,154	6,270,086	26,631,231		215,257,914	43,051,583	12·7	87·3
1871–1875	27,955,068	118,734,950	5,591,014	23,746,990	23,645,243 (1871–1880)	316,585,069	63,317,014	8·1	91·9
1876–1880	27,715,550	117,717,485	5,543,110	23,543,497		393,878,009	78,775,602	6·6	93·4
1881–1885	23,973,773	101,824,943	4,794,755	20,364,989	21,780,472 (1881–1890)	460,019,722	92,003,944	5	95
1886	5,135,679	21,813,006	5,135,679	21,813,006		93,297,290	93,297,290	5·2	94·8
1887	5,116,861	21,733,080	5,116,861	21,733,080		96,123,586	96,123,586	5	95
1888	5,330,775	22,641,648	5,330,775	22,641,648		108,827,606	108,827,606	4·6	95·4
1889	5,973,790	25,372,755	5,973,790	25,372,755		120,213,611	120,213,611	4·7	95·3
1890	5,749,306	24,419,293	5,749,306	24,419,293		126,095,062	126,095,062	4·3	95·7
1891	6,320,194	26,844,052	6,320,194	26,844,052	(7 years) 36,744,489 (1891–1897)	137,170,919	137,170,919	4·4	95·6
1892	7,094,266	30,131,806	7,094,266	30,131,806		153,151,762	153,151,762	4·4	95·6
1893	7,618,811	32,359,729	7,618,811	32,359,729		165,472,621	165,472,621	4·4	95·6
1894	8,764,362	37,225,313	8,764,362	37,225,313		164,610,394	164,610,394	5	95
1895	9,641,337	40,950,092	9,641,337	40,950,092		167,288,729	167,288,729	5·4	94·6
1896	9,817,991	41,700,431	9,817,991	41,700,431		165,100,887	165,100,887	5·6	94·4
1897	11,300,000 [1]	48,000,000 [1]	11,300,000 [1]	48,000,000 [1]					
Total	445,868,089 oz.	£1,893,761,368				8,164,953,183 oz.		5	95

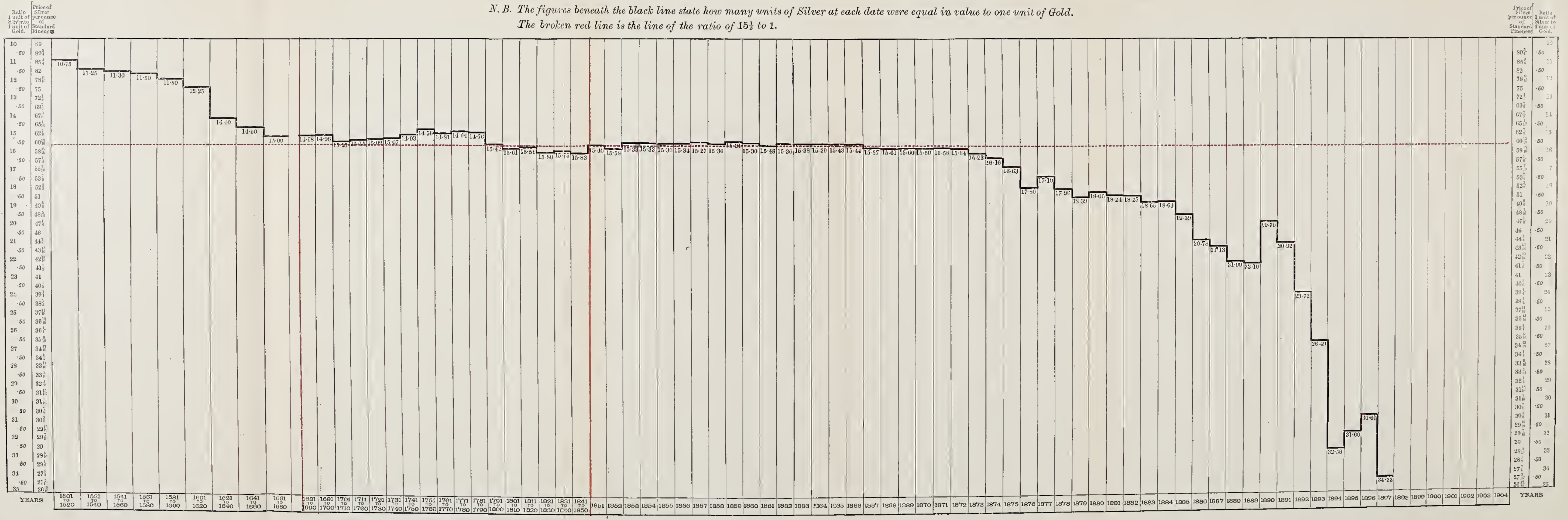
[1] Estimated roughly.

		£
From 1493 to 1800, or 307 years, the aggregate supply of gold amounted to	... ...	487,109,101
,, 1801 to 1840, or 40 ,, ,, ,, ,,	... ...	87,021,778
,, 1841 to 1870, or 30 ,, ,, ,, ,,	... ...	608,161,906
,, 1871 to 1894, or 24 ,, ,, ,, ,,	... ...	580,818,060
,, 1895 to 1897, or 3 ,, ,, ,, ,,	... ...	130,650,523
Total	...	£1,893,761,368

RELATIVE VALUE OF **GOLD** AND **SILVER**;—FROM **1500** UP TO **1898**.

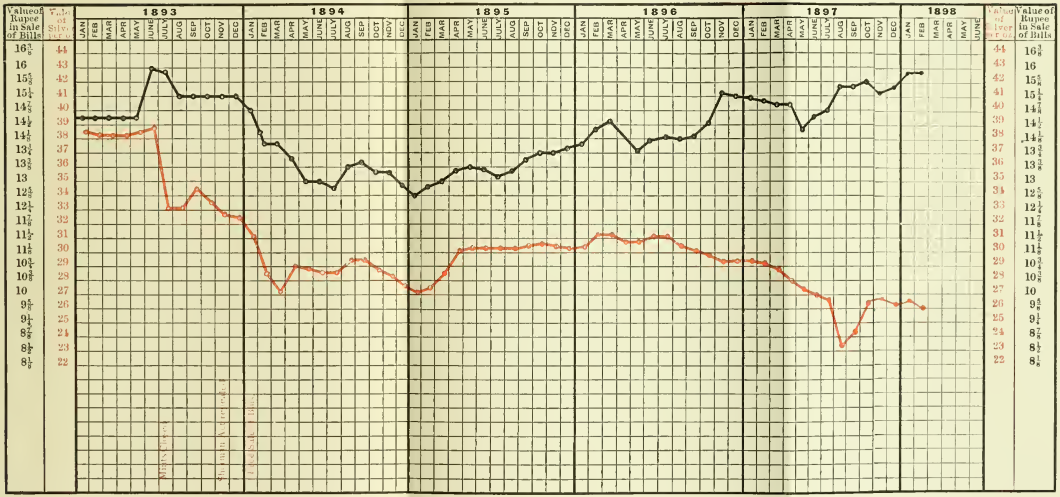
From 1501 to 1885 copied from Dr. Soetbeer's "Materialien" on the Precious Metals. From 1886 compiled from the Report of the Director of the United States Mint.

N. B. The figures beneath the black line state how many units of Silver at each date were equal in value to one unit of Gold.
The broken red line is the line of the ratio of 15½ to 1.



APPENDIX III.

Diagram showing the relative value of the Rupee, and of Silver, in gold.



Sept. 7, 1897, $16\frac{3}{32}$d.

The average exchange value of the Rupee realised by the Indian Government was in

1893–4	*14.547*	*pence.*
1894–5	*13.101*	,,
1895–6	*13.680*	,,
1896–7	*14.449*	,,

Rupee Maximum, June 27, 1893, $16\frac{1}{32}$d.

Rupee Minimum, Jan. 23, 1895, $12\frac{13}{32}$d.

Silver Minimum, Aug. 25, 1897, $23\frac{3}{4}$d.

The values are taken at the mean price between the highest and the lowest in each month.

The Index Numbers in the Diagram are arranged to show the approximate melting value of the Rupee alongside of each Price of Silver. As the Rupee contains $\frac{55}{148}$ of the Pure Silver contained in an Ounce of (so called) Standard Silver, the progression of $\frac{3}{8}$d. in the Rupee column practically corresponds to that of 1d. in the Silver column.

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THE END.

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